

FIGURE 3

LEGEND

Column headings from left to right are (A)'Atom Number', (B)'Atom Type', (C)'Amino Acid', (D)'Chain Identifier', (E)'Amino Acid Number', (F)'X Coordinate', (G)'Y Coordinate', (H)'Z Coordinate', (I)'Occupancy' (OCC) and (J)'B factor'.

A	B	C	D	E	F	G	H	I	J
1	N	ALA	A	126	-1.225	18.275	58.949	1.00	62.30
2	CA	ALA	A	126	-0.160	18.687	59.906	1.00	61.70
3	CB	ALA	A	126	-0.351	20.162	60.315	1.00	62.19
4	C	ALA	A	126	-0.137	17.763	61.129	1.00	60.66
5	O	ALA	A	126	-0.940	17.908	62.044	1.00	61.53
6	N	ALA	A	127	0.784	16.805	61.123	1.00	59.08
7	CA	ALA	A	127	0.859	15.815	62.173	1.00	57.38
8	CB	ALA	A	127	1.255	14.482	61.599	1.00	57.77
9	C	ALA	A	127	1.878	16.247	63.205	1.00	56.23
10	O	ALA	A	127	3.075	16.075	63.000	1.00	56.65
11	N	TRP	A	128	1.401	16.816	64.301	1.00	53.28
12	CA	TRP	A	128	2.263	17.245	65.380	1.00	50.98
13	CB	TRP	A	128	1.566	18.369	66.133	1.00	51.50
14	CG	TRP	A	128	1.402	19.546	65.268	1.00	52.38
15	CD1	TRP	A	128	0.246	20.024	64.714	1.00	53.18
16	NE1	TRP	A	128	0.515	21.153	63.973	1.00	53.05
17	CE2	TRP	A	128	1.862	21.394	64.017	1.00	54.15
18	CD2	TRP	A	128	2.442	20.405	64.834	1.00	53.19
19	CE3	TRP	A	128	3.820	20.440	65.049	1.00	54.16
20	CZ3	TRP	A	128	4.554	21.416	64.458	1.00	53.73
21	CH2	TRP	A	128	3.949	22.391	63.660	1.00	54.15
22	CZ2	TRP	A	128	2.606	22.395	63.431	1.00	54.51
23	C	TRP	A	128	2.517	16.093	66.332	1.00	49.09
24	O	TRP	A	128	1.747	15.154	66.370	1.00	48.80
25	N	ALA	A	129	3.598	16.200	67.100	1.00	47.28
26	CA	ALA	A	129	3.992	15.236	68.114	1.00	46.51
27	CB	ALA	A	129	5.028	14.287	67.555	1.00	45.67
28	C	ALA	A	129	4.596	16.072	69.262	1.00	45.56
29	O	ALA	A	129	4.980	17.220	69.037	1.00	43.83
30	N	LEU	A	130	4.659	15.530	70.480	1.00	46.03
31	CA	LEU	A	130	5.155	16.302	71.628	1.00	46.26
32	CB	LEU	A	130	5.119	15.469	72.909	1.00	46.46
33	CG	LEU	A	130	4.612	16.028	74.261	1.00	49.12
34	CD1	LEU	A	130	5.469	15.546	75.419	1.00	47.91
35	CD2	LEU	A	130	4.470	17.523	74.311	1.00	46.43
36	C	LEU	A	130	6.570	16.796	71.348	1.00	46.06
37	O	LEU	A	130	6.933	17.927	71.722	1.00	45.86
38	N	GLU	A	131	7.349	15.967	70.657	1.00	44.57
39	CA	GLU	A	131	8.736	16.309	70.328	1.00	43.80
40	CB	GLU	A	131	9.506	15.118	69.669	1.00	45.34
41	CG	GLU	A	131	9.077	14.915	68.219	1.00	50.12
42	CD	GLU	A	131	9.560	13.599	67.616	1.00	59.64

FIGURE 3A-(Cont.)

A	B	C	D	E	F	G	H	I	J
43	OE1	GLU	A	131	8.836	13.078	66.726	1.00	64.32
44	OE2	GLU	A	131	10.648	13.084	67.993	1.00	63.67
45	C	GLU	A	131	8.937	17.577	69.485	1.00	41.74
46	O	GLU	A	131	10.041	18.101	69.415	1.00	41.77
47	N	ASP	A	132	7.881	18.078	68.841	1.00	39.05
48	CA	ASP	A	132	8.010	19.323	68.100	1.00	38.32
49	CB	ASP	A	132	6.935	19.466	67.028	1.00	39.96
50	CG	ASP	A	132	6.946	18.299	66.066	1.00	41.30
51	OD1	ASP	A	132	8.056	17.837	65.689	1.00	46.10
52	OD2	ASP	A	132	5.894	17.772	65.723	1.00	42.94
53	C	ASP	A	132	7.926	20.559	68.989	1.00	37.33
54	O	ASP	A	132	8.094	21.640	68.472	1.00	36.39
55	N	PHE	A	133	7.692	20.370	70.289	1.00	36.67
56	CA	PHE	A	133	7.485	21.498	71.213	1.00	37.49
57	CB	PHE	A	133	5.998	21.569	71.740	1.00	36.30
58	CG	PHE	A	133	4.958	21.474	70.656	1.00	38.62
59	CD1	PHE	A	133	4.504	22.602	69.999	1.00	38.46
60	CE1	PHE	A	133	3.564	22.499	68.993	1.00	41.24
61	CZ	PHE	A	133	3.108	21.250	68.611	1.00	39.81
62	CE2	PHE	A	133	3.564	20.125	69.246	1.00	38.63
63	CD2	PHE	A	133	4.495	20.235	70.252	1.00	39.61
64	C	PHE	A	133	8.475	21.593	72.399	1.00	38.04
65	O	PHE	A	133	8.934	20.578	72.922	1.00	37.77
66	N	GLU	A	134	8.825	22.817	72.801	1.00	37.74
67	CA	GLU	A	134	9.511	22.989	74.079	1.00	38.18
68	CB	GLU	A	134	10.583	24.031	73.989	1.00	38.70
69	CG	GLU	A	134	11.692	23.627	73.052	1.00	45.76
70	CD	GLU	A	134	12.863	24.551	73.142	1.00	52.60
71	OE1	GLU	A	134	14.009	24.040	72.996	1.00	57.17
72	OE2	GLU	A	134	12.635	25.768	73.380	1.00	57.77
73	C	GLU	A	134	8.424	23.456	74.979	1.00	37.78
74	O	GLU	A	134	7.697	24.400	74.647	1.00	37.67
75	N	ILE	A	135	8.295	22.825	76.123	1.00	35.90
76	CA	ILE	A	135	7.223	23.145	76.998	1.00	37.06
77	CB	ILE	A	135	6.657	21.878	77.499	1.00	37.79
78	CG1	ILE	A	135	5.960	21.157	76.334	1.00	41.64
79	CD1	ILE	A	135	4.794	20.341	76.792	1.00	48.55
80	CG2	ILE	A	135	5.700	22.126	78.593	1.00	37.59
81	C	ILE	A	135	7.682	24.058	78.152	1.00	36.78
82	O	ILE	A	135	8.778	23.906	78.672	1.00	34.54
83	N	GLY	A	136	6.819	24.998	78.533	1.00	37.69
84	CA	GLY	A	136	7.179	25.975	79.541	1.00	36.95
85	C	GLY	A	136	6.383	25.807	80.792	1.00	37.86
86	O	GLY	A	136	6.052	24.706	81.139	1.00	38.85
87	N	ARG	A	137	6.052	26.917	81.449	1.00	38.75
88	CA	ARG	A	137	5.311	26.886	82.699	1.00	39.01
89	CB	ARG	A	137	5.392	28.252	83.369	1.00	40.79
90	CG	ARG	A	137	4.941	29.390	82.494	1.00	39.62
91	CD	ARG	A	137	4.835	30.762	83.163	1.00	45.72
92	NE	ARG	A	137	3.554	30.754	83.754	1.00	48.61

FIGURE 3**LEGEND**

Column headings from left to right are (A)'Atom Number', (B)'Atom Type', (C)'Amino Acid', (D)'Chain Identifier', (E)'Amino Acid Number', (F)'X Coordinate', (G)'Y Coordinate', (H)'Z Coordinate', (I)'Occupancy' (OCC) and (J)'B factor'.

A	B	C	D	E	F	G	H	I	J
1	N	ALA	A	126	-1.225	18.275	58.949	1.00	62.30
2	CA	ALA	A	126	-0.160	18.687	59.906	1.00	61.70
3	CB	ALA	A	126	-0.351	20.162	60.315	1.00	62.19
4	C	ALA	A	126	-0.137	17.763	61.129	1.00	60.66
5	O	ALA	A	126	-0.940	17.908	62.044	1.00	61.53
6	N	ALA	A	127	0.784	16.805	61.123	1.00	59.08
7	CA	ALA	A	127	0.859	15.815	62.173	1.00	57.38
8	CB	ALA	A	127	1.255	14.482	61.599	1.00	57.77
9	C	ALA	A	127	1.878	16.247	63.205	1.00	56.23
10	O	ALA	A	127	3.075	16.075	63.000	1.00	56.65
11	N	TRP	A	128	1.401	16.816	64.301	1.00	53.28
12	CA	TRP	A	128	2.263	17.245	65.380	1.00	50.98
13	CB	TRP	A	128	1.566	18.369	66.133	1.00	51.50
14	CG	TRP	A	128	1.402	19.546	65.268	1.00	52.38
15	CD1	TRP	A	128	0.246	20.024	64.714	1.00	53.18
16	NE1	TRP	A	128	0.515	21.153	63.973	1.00	53.05
17	CE2	TRP	A	128	1.862	21.394	64.017	1.00	54.15
18	CD2	TRP	A	128	2.442	20.405	64.834	1.00	53.19
19	CE3	TRP	A	128	3.820	20.440	65.049	1.00	54.16
20	CZ3	TRP	A	128	4.554	21.416	64.458	1.00	53.73
21	CH2	TRP	A	128	3.949	22.391	63.660	1.00	54.15
22	CZ2	TRP	A	128	2.606	22.395	63.431	1.00	54.51
23	C	TRP	A	128	2.517	16.093	66.332	1.00	49.09
24	O	TRP	A	128	1.747	15.154	66.370	1.00	48.80
25	N	ALA	A	129	3.598	16.200	67.100	1.00	47.28
26	CA	ALA	A	129	3.992	15.236	68.114	1.00	46.51
27	CB	ALA	A	129	5.028	14.287	67.555	1.00	45.67
28	C	ALA	A	129	4.596	16.072	69.262	1.00	45.56
29	O	ALA	A	129	4.980	17.220	69.037	1.00	43.83
30	N	LEU	A	130	4.659	15.530	70.480	1.00	46.03
31	CA	LEU	A	130	5.155	16.302	71.628	1.00	46.26
32	CB	LEU	A	130	5.119	15.469	72.909	1.00	46.46
33	CG	LEU	A	130	4.612	16.028	74.261	1.00	49.12
34	CD1	LEU	A	130	5.469	15.546	75.419	1.00	47.91
35	CD2	LEU	A	130	4.470	17.523	74.311	1.00	46.43
36	C	LEU	A	130	6.570	16.796	71.348	1.00	46.06
37	O	LEU	A	130	6.933	17.927	71.722	1.00	45.86
38	N	GLU	A	131	7.349	15.967	70.657	1.00	44.57
39	CA	GLU	A	131	8.736	16.309	70.328	1.00	43.80
40	CB	GLU	A	131	9.506	15.118	69.669	1.00	45.34
41	CG	GLU	A	131	9.077	14.915	68.219	1.00	50.12
42	CD	GLU	A	131	9.560	13.599	67.616	1.00	59.64

FIGURE 3A

A	B	C	D	E	F	G	H	I	J
43	OE1	GLU	A	131	8.836	13.078	66.726	1.00	64.32
44	OE2	GLU	A	131	10.648	13.084	67.993	1.00	63.67
45	C	GLU	A	131	8.937	17.577	69.485	1.00	41.74
46	O	GLU	A	131	10.041	18.101	69.415	1.00	41.77
47	N	ASP	A	132	7.881	18.078	68.841	1.00	39.05
48	CA	ASP	A	132	8.010	19.323	68.100	1.00	38.32
49	CB	ASP	A	132	6.935	19.466	67.028	1.00	39.96
50	CG	ASP	A	132	6.946	18.299	66.066	1.00	41.30
51	OD1	ASP	A	132	8.056	17.837	65.689	1.00	46.10
52	OD2	ASP	A	132	5.894	17.772	65.723	1.00	42.94
53	C	ASP	A	132	7.926	20.559	68.989	1.00	37.33
54	O	ASP	A	132	8.094	21.640	68.472	1.00	36.39
55	N	PHE	A	133	7.692	20.370	70.289	1.00	36.67
56	CA	PHE	A	133	7.485	21.498	71.213	1.00	37.49
57	CB	PHE	A	133	5.998	21.569	71.740	1.00	36.30
58	CG	PHE	A	133	4.958	21.474	70.656	1.00	38.62
59	CD1	PHE	A	133	4.504	22.602	69.999	1.00	38.46
60	CE1	PHE	A	133	3.564	22.499	68.993	1.00	41.24
61	CZ	PHE	A	133	3.108	21.250	68.611	1.00	39.81
62	CE2	PHE	A	133	3.564	20.125	69.246	1.00	38.63
63	CD2	PHE	A	133	4.495	20.235	70.252	1.00	39.61
64	C	PHE	A	133	8.475	21.593	72.399	1.00	38.04
65	O	PHE	A	133	8.934	20.578	72.922	1.00	37.77
66	N	GLU	A	134	8.825	22.817	72.801	1.00	37.74
67	CA	GLU	A	134	9.511	22.989	74.079	1.00	38.18
68	CB	GLU	A	134	10.583	24.031	73.989	1.00	38.70
69	CG	GLU	A	134	11.692	23.627	73.052	1.00	45.76
70	CD	GLU	A	134	12.863	24.551	73.142	1.00	52.60
71	OE1	GLU	A	134	14.009	24.040	72.996	1.00	57.17
72	OE2	GLU	A	134	12.635	25.768	73.380	1.00	57.77
73	C	GLU	A	134	8.424	23.456	74.979	1.00	37.78
74	O	GLU	A	134	7.697	24.400	74.647	1.00	37.67
75	N	ILE	A	135	8.295	22.825	76.123	1.00	35.90
76	CA	ILE	A	135	7.223	23.145	76.998	1.00	37.06
77	CB	ILE	A	135	6.657	21.878	77.499	1.00	37.79
78	CG1	ILE	A	135	5.960	21.157	76.334	1.00	41.64
79	CD1	ILE	A	135	4.794	20.341	76.792	1.00	48.55
80	CG2	ILE	A	135	5.700	22.126	78.593	1.00	37.59
81	C	ILE	A	135	7.682	24.058	78.152	1.00	36.78
82	O	ILE	A	135	8.778	23.906	78.672	1.00	34.54
83	N	GLY	A	136	6.819	24.998	78.533	1.00	37.69
84	CA	GLY	A	136	7.179	25.975	79.541	1.00	36.95
85	C	GLY	A	136	6.383	25.807	80.792	1.00	37.86
86	O	GLY	A	136	6.052	24.706	81.139	1.00	38.85
87	N	ARG	A	137	6.052	26.917	81.449	1.00	38.75
88	CA	ARG	A	137	5.311	26.886	82.699	1.00	39.01
89	CB	ARG	A	137	5.392	28.252	83.369	1.00	40.79
90	CG	ARG	A	137	4.941	29.390	82.494	1.00	39.62
91	CD	ARG	A	137	4.835	30.762	83.163	1.00	45.72
92	NE	ARG	A	137	3.554	30.754	83.754	1.00	48.61

FIGURE 3B

A	B	C	D	E	F	G	H	I	J
93	CZ	ARG	A	137	2.501	31.519	83.484	1.00	42.31
94	NH1	ARG	A	137	2.481	32.576	82.674	1.00	39.40
95	NH2	ARG	A	137	1.423	31.205	84.148	1.00	40.08
96	C	ARG	A	137	3.841	26.591	82.437	1.00	38.31
97	O	ARG	A	137	3.319	26.884	81.363	1.00	35.25
98	N	PRO	A	138	3.186	26.035	83.432	1.00	38.59
99	CA	PRO	A	138	1.741	25.812	83.367	1.00	37.99
100	CB	PRO	A	138	1.416	25.119	84.688	1.00	38.79
101	CG	PRO	A	138	2.691	24.697	85.283	1.00	38.62
102	CD	PRO	A	138	3.782	25.569	84.712	1.00	40.69
103	C	PRO	A	138	1.059	27.163	83.333	1.00	37.95
104	O	PRO	A	138	1.369	28.068	84.123	1.00	36.30
105	N	LEU	A	139	0.165	27.313	82.368	1.00	37.66
106	CA	LEU	A	139	-0.617	28.512	82.249	1.00	35.85
107	CB	LEU	A	139	-1.012	28.701	80.804	1.00	34.42
108	CG	LEU	A	139	0.147	29.153	79.918	1.00	35.08
109	CD1	LEU	A	139	-0.222	29.021	78.419	1.00	33.54
110	CD2	LEU	A	139	0.576	30.644	80.230	1.00	35.10
111	C	LEU	A	139	-1.861	28.421	83.112	1.00	36.45
112	O	LEU	A	139	-2.410	29.451	83.532	1.00	35.77
113	N	GLY	A	140	-2.322	27.205	83.377	1.00	36.33
114	CA	GLY	A	140	-3.533	27.031	84.172	1.00	36.31
115	C	GLY	A	140	-3.900	25.579	84.428	1.00	37.85
116	O	GLY	A	140	-3.285	24.651	83.886	1.00	38.33
117	N	LYS	A	141	-4.872	25.372	85.301	1.00	38.89
118	CA	LYS	A	141	-5.255	24.016	85.681	1.00	40.43
119	CB	LYS	A	141	-5.479	23.905	87.204	1.00	41.81
120	CG	LYS	A	141	-4.305	23.314	88.006	1.00	47.61
121	CD	LYS	A	141	-4.581	23.141	89.534	1.00	54.52
122	CE	LYS	A	141	-4.243	24.411	90.322	1.00	58.25
123	NZ	LYS	A	141	-3.204	25.271	89.614	1.00	61.08
124	C	LYS	A	141	-6.575	23.809	84.999	1.00	39.72
125	O	LYS	A	141	-7.461	24.608	85.185	1.00	39.23
126	N	GLY	A	142	-6.677	22.773	84.167	1.00	39.64
127	CA	GLY	A	142	-7.934	22.410	83.523	1.00	40.24
128	C	GLY	A	142	-8.491	21.213	84.310	1.00	41.17
129	O	GLY	A	142	-7.897	20.741	85.294	1.00	41.10
130	N	LYS	A	143	-9.640	20.722	83.907	1.00	41.52
131	CA	LYS	A	143	-10.245	19.612	84.630	1.00	42.27
132	CB	LYS	A	143	-11.686	19.435	84.202	1.00	43.00
133	CG	LYS	A	143	-12.432	18.544	85.170	1.00	48.58
134	CD	LYS	A	143	-13.719	18.034	84.570	1.00	52.87
135	CE	LYS	A	143	-14.622	17.577	85.684	1.00	56.82
136	NZ	LYS	A	143	-14.896	16.117	85.592	1.00	61.41
137	C	LYS	A	143	-9.471	18.292	84.453	1.00	41.56
138	O	LYS	A	143	-9.248	17.572	85.412	1.00	40.75
139	N	PHE	A	144	-9.014	18.045	83.228	1.00	40.56
140	CA	PHE	A	144	-8.344	16.807	82.827	1.00	40.12
141	CB	PHE	A	144	-9.010	16.315	81.546	1.00	40.15
142	CG	PHE	A	144	-10.461	16.037	81.725	1.00	42.78
143	CD1	PHE	A	144	-10.877	14.867	82.383	1.00	45.37

FIGURE 3C

A	B	C	D	E	F	G	H	I	J
144	CE1	PHE	A	144	-12.211	14.607	82.568	1.00	42.37
145	CZ	PHE	A	144	-13.160	15.517	82.120	1.00	44.22
146	CE2	PHE	A	144	-12.757	16.679	81.499	1.00	43.36
147	CD2	PHE	A	144	-11.420	16.948	81.315	1.00	39.89
148	C	PHE	A	144	-6.842	16.866	82.611	1.00	38.97
149	O	PHE	A	144	-6.253	15.909	82.150	1.00	36.84
150	N	GLY	A	145	-6.208	17.962	83.020	1.00	37.37
151	CA	GLY	A	145	-4.783	18.120	82.806	1.00	38.17
152	C	GLY	A	145	-4.486	19.606	82.814	1.00	37.75
153	O	GLY	A	145	-5.404	20.395	82.853	1.00	38.54
154	N	ASN	A	146	-3.230	19.999	82.753	1.00	38.01
155	CA	ASN	A	146	-2.930	21.412	82.804	1.00	37.94
156	CB	ASN	A	146	-1.619	21.626	83.563	1.00	38.27
157	CG	ASN	A	146	-1.718	21.186	85.022	1.00	43.37
158	OD1	ASN	A	146	-2.704	21.454	85.695	1.00	49.18
159	ND2	ASN	A	146	-0.698	20.506	85.499	1.00	48.99
160	C	ASN	A	146	-2.821	21.982	81.391	1.00	36.46
161	O	ASN	A	146	-2.732	21.209	80.411	1.00	35.01
162	N	VAL	A	147	-2.830	23.317	81.293	1.00	34.34
163	CA	VAL	A	147	-2.512	23.965	80.024	1.00	32.03
164	CB	VAL	A	147	-3.518	25.083	79.686	1.00	32.73
165	CG1	VAL	A	147	-3.098	25.767	78.335	1.00	31.49
166	CG2	VAL	A	147	-4.929	24.556	79.623	1.00	33.51
167	C	VAL	A	147	-1.081	24.524	80.153	1.00	32.07
168	O	VAL	A	147	-0.748	25.168	81.197	1.00	31.84
169	N	TYR	A	148	-0.227	24.312	79.148	1.00	29.65
170	CA	TYR	A	148	1.167	24.744	79.257	1.00	30.70
171	CB	TYR	A	148	2.135	23.546	79.082	1.00	30.68
172	CG	TYR	A	148	1.969	22.547	80.199	1.00	34.98
173	CD1	TYR	A	148	1.006	21.542	80.117	1.00	36.63
174	CE1	TYR	A	148	0.800	20.623	81.187	1.00	43.31
175	CZ	TYR	A	148	1.568	20.721	82.344	1.00	43.61
176	OH	TYR	A	148	1.362	19.826	83.394	1.00	45.34
177	CE2	TYR	A	148	2.513	21.730	82.456	1.00	43.40
178	CD2	TYR	A	148	2.719	22.648	81.356	1.00	40.12
179	C	TYR	A	148	1.532	25.740	78.197	1.00	30.72
180	O	TYR	A	148	1.079	25.648	77.054	1.00	30.29
181	N	LEU	A	149	2.386	26.675	78.554	1.00	30.08
182	CA	LEU	A	149	3.001	27.513	77.534	1.00	30.86
183	CB	LEU	A	149	3.880	28.526	78.247	1.00	32.09
184	CG	LEU	A	149	4.108	29.924	77.676	1.00	36.09
185	CD1	LEU	A	149	5.567	30.516	77.808	1.00	34.85
186	CD2	LEU	A	149	3.332	30.344	76.361	1.00	32.07
187	C	LEU	A	149	3.902	26.615	76.717	1.00	29.91
188	O	LEU	A	149	4.557	25.743	77.269	1.00	31.11
189	N	ALA	A	150	4.008	26.837	75.417	1.00	29.95
190	CA	ALA	A	150	4.879	25.986	74.645	1.00	29.87
191	CB	ALA	A	150	4.091	24.697	74.127	1.00	29.08
192	C	ALA	A	150	5.435	26.770	73.456	1.00	30.54
193	O	ALA	A	150	4.860	27.774	72.966	1.00	29.82
194	N	ARG	A	151	6.558	26.299	72.990	1.00	30.55

FIGURE 3D

A	B	C	D	E	F	G	H	I	J
195	CA	ARG	A	151	7.164	26.847	71.809	1.00	32.81
196	CB	ARG	A	151	8.465	27.561	72.162	1.00	33.58
197	CG	ARG	A	151	8.864	28.606	71.141	1.00	34.41
198	CD	ARG	A	151	10.216	29.272	71.493	1.00	37.68
199	NE	ARG	A	151	11.314	28.358	71.774	1.00	41.98
200	CZ	ARG	A	151	12.579	28.754	71.840	1.00	45.91
201	NH1	ARG	A	151	12.855	30.033	71.642	1.00	45.17
202	NH2	ARG	A	151	13.554	27.891	72.109	1.00	48.67
203	C	ARG	A	151	7.393	25.735	70.792	1.00	33.58
204	O	ARG	A	151	7.806	24.623	71.151	1.00	36.75
205	N	GLU	A	152	6.998	26.037	69.557	1.00	35.31
206	CA	GLU	A	152	7.214	25.150	68.433	1.00	38.01
207	CB	GLU	A	152	6.339	25.554	67.232	1.00	38.19
208	CG	GLU	A	152	6.245	24.450	66.177	1.00	44.01
209	CD	GLU	A	152	7.475	24.363	65.241	1.00	48.90
210	OE1	GLU	A	152	7.735	25.334	64.489	1.00	52.00
211	OE2	GLU	A	152	8.192	23.320	65.250	1.00	51.05
212	C	GLU	A	152	8.677	25.296	68.065	1.00	37.84
213	O	GLU	A	152	9.161	26.382	67.791	1.00	38.28
214	N	LYS	A	153	9.392	24.200	68.043	1.00	39.21
215	CA	LYS	A	153	10.819	24.306	67.841	1.00	42.09
216	CB	LYS	A	153	11.481	22.967	68.153	1.00	42.63
217	CG	LYS	A	153	11.928	22.851	69.590	1.00	48.61
218	CD	LYS	A	153	11.539	21.510	70.175	1.00	55.42
219	CE	LYS	A	153	11.720	20.374	69.179	1.00	60.62
220	NZ	LYS	A	153	13.095	19.664	69.260	1.00	68.26
221	C	LYS	A	153	11.287	24.885	66.509	1.00	42.57
222	O	LYS	A	153	12.262	25.589	66.449	1.00	43.65
223	N	GLN	A	154	10.603	24.623	65.421	1.00	43.01
224	CA	GLN	A	154	11.158	25.126	64.163	1.00	44.19
225	CB	GLN	A	154	10.676	24.231	63.015	1.00	44.67
226	CG	GLN	A	154	11.442	22.952	63.045	1.00	53.28
227	CD	GLN	A	154	11.408	22.213	61.740	1.00	60.70
228	OE1	GLN	A	154	10.328	21.982	61.174	1.00	66.15
229	NE2	GLN	A	154	12.586	21.838	61.246	1.00	64.53
230	C	GLN	A	154	10.856	26.600	63.884	1.00	41.49
231	O	GLN	A	154	11.660	27.356	63.358	1.00	42.67
232	N	SER	A	155	9.675	27.022	64.254	1.00	38.39
233	CA	SER	A	155	9.313	28.371	63.946	1.00	35.68
234	CB	SER	A	155	7.840	28.364	63.594	1.00	34.74
235	OG	SER	A	155	7.196	27.875	64.746	1.00	34.70
236	C	SER	A	155	9.532	29.313	65.140	1.00	33.68
237	O	SER	A	155	9.505	30.517	64.946	1.00	33.85
238	N	LYS	A	156	9.672	28.739	66.331	1.00	32.82
239	CA	LYS	A	156	9.704	29.445	67.645	1.00	34.59
240	CB	LYS	A	156	10.858	30.467	67.753	1.00	34.66
241	CG	LYS	A	156	12.319	29.876	67.480	1.00	36.79
242	CD	LYS	A	156	13.429	30.907	67.970	1.00	44.57
243	CE	LYS	A	156	14.696	31.115	67.056	1.00	47.52
244	NZ	LYS	A	156	14.787	32.563	66.539	1.00	46.31
245	C	LYS	A	156	8.335	30.102	67.987	1.00	33.10

FIGURE 3E

A	B	C	D	E	F	G	H	I	J
246	O	LYS	A	156	8.218	31.065	68.804	1.00	31.56
247	N	PHE	A	157	7.302	29.553	67.386	1.00	31.13
248	CA	PHE	A	157	5.948	30.020	67.646	1.00	31.45
249	CB	PHE	A	157	5.016	29.469	66.575	1.00	32.15
250	CG	PHE	A	157	3.713	30.177	66.469	1.00	34.87
251	CD1	PHE	A	157	3.527	31.155	65.492	1.00	38.48
252	CE1	PHE	A	157	2.274	31.786	65.329	1.00	40.08
253	CZ	PHE	A	157	1.209	31.427	66.143	1.00	37.15
254	CE2	PHE	A	157	1.368	30.425	67.104	1.00	34.69
255	CD2	PHE	A	157	2.644	29.795	67.253	1.00	36.13
256	C	PHE	A	157	5.466	29.641	69.057	1.00	29.29
257	O	PHE	A	157	5.395	28.469	69.412	1.00	29.48
258	N	ILE	A	158	5.022	30.656	69.813	1.00	29.61
259	CA	ILE	A	158	4.651	30.447	71.207	1.00	30.50
260	CB	ILE	A	158	4.899	31.717	72.032	1.00	31.00
261	CG1	ILE	A	158	6.366	31.797	72.339	1.00	36.27
262	CD1	ILE	A	158	6.687	30.925	73.512	1.00	37.94
263	CG2	ILE	A	158	4.419	31.510	73.466	1.00	32.23
264	C	ILE	A	158	3.209	30.163	71.230	1.00	29.07
265	O	ILE	A	158	2.473	30.911	70.644	1.00	30.88
266	N	LEU	A	159	2.745	29.157	71.935	1.00	28.37
267	CA	LEU	A	159	1.339	28.868	71.885	1.00	28.41
268	CB	LEU	A	159	1.085	27.936	70.692	1.00	28.97
269	CG	LEU	A	159	1.953	26.777	70.259	1.00	34.00
270	CD1	LEU	A	159	1.782	25.602	71.203	1.00	35.94
271	CD2	LEU	A	159	1.737	26.341	68.787	1.00	39.02
272	C	LEU	A	159	1.079	28.193	73.204	1.00	27.83
273	O	LEU	A	159	1.957	28.166	74.034	1.00	27.51
274	N	ALA	A	160	-0.120	27.685	73.409	1.00	29.15
275	CA	ALA	A	160	-0.450	27.016	74.661	1.00	30.37
276	CB	ALA	A	160	-1.651	27.684	75.323	1.00	28.84
277	C	ALA	A	160	-0.818	25.602	74.297	1.00	32.10
278	O	ALA	A	160	-1.472	25.371	73.269	1.00	31.99
279	N	LEU	A	161	-0.434	24.654	75.163	1.00	33.02
280	CA	LEU	A	161	-0.741	23.261	74.941	1.00	34.14
281	CB	LEU	A	161	0.577	22.495	74.913	1.00	34.88
282	CG	LEU	A	161	0.908	21.455	73.868	1.00	39.45
283	CD1	LEU	A	161	0.455	21.854	72.442	1.00	35.63
284	CD2	LEU	A	161	2.466	21.138	73.933	1.00	40.14
285	C	LEU	A	161	-1.648	22.780	76.036	1.00	33.03
286	O	LEU	A	161	-1.271	22.762	77.217	1.00	33.04
287	N	LYS	A	162	-2.885	22.456	75.657	1.00	31.43
288	CA	LYS	A	162	-3.856	21.979	76.610	1.00	32.34
289	CB	LYS	A	162	-5.251	22.451	76.196	1.00	32.99
290	CG	LYS	A	162	-6.391	21.951	77.087	1.00	29.62
291	CD	LYS	A	162	-7.595	22.831	76.855	1.00	29.33
292	CE	LYS	A	162	-8.841	22.204	77.533	1.00	27.32
293	NZ	LYS	A	162	-10.098	22.987	77.412	1.00	31.96
294	C	LYS	A	162	-3.772	20.441	76.654	1.00	33.11
295	O	LYS	A	162	-4.017	19.775	75.666	1.00	33.31
296	N	VAL	A	163	-3.364	19.907	77.790	1.00	35.02

FIGURE 3F

A	B	C	D	E	F	G	H	I	J
297	CA	VAL	A	163	-3.205	18.471	77.983	1.00	37.14
298	CB	VAL	A	163	-1.971	18.203	78.854	1.00	36.58
299	CG1	VAL	A	163	-1.720	16.660	79.039	1.00	37.74
300	CG2	VAL	A	163	-0.709	18.909	78.260	1.00	38.41
301	C	VAL	A	163	-4.445	17.854	78.653	1.00	37.59
302	O	VAL	A	163	-4.960	18.395	79.644	1.00	37.22
303	N	LEU	A	164	-4.977	16.767	78.073	1.00	39.14
304	CA	LEU	A	164	-6.104	16.048	78.686	1.00	39.01
305	CB	LEU	A	164	-7.427	16.202	77.930	1.00	39.22
306	CG	LEU	A	164	-7.961	17.622	77.781	1.00	38.09
307	CD1	LEU	A	164	-7.363	18.125	76.508	1.00	38.01
308	CD2	LEU	A	164	-9.453	17.647	77.711	1.00	37.35
309	C	LEU	A	164	-5.759	14.562	78.783	1.00	39.97
310	O	LEU	A	164	-5.369	13.952	77.798	1.00	38.76
311	N	PHE	A	165	-5.880	14.004	79.986	1.00	40.67
312	CA	PHE	A	165	-5.535	12.599	80.211	1.00	42.42
313	CB	PHE	A	165	-5.191	12.355	81.686	1.00	42.83
314	CG	PHE	A	165	-3.815	12.784	82.030	1.00	46.45
315	CD1	PHE	A	165	-3.573	14.040	82.560	1.00	47.62
316	CE1	PHE	A	165	-2.290	14.434	82.868	1.00	47.96
317	CZ	PHE	A	165	-1.227	13.574	82.628	1.00	50.56
318	CE2	PHE	A	165	-1.446	12.349	82.067	1.00	48.72
319	CD2	PHE	A	165	-2.740	11.951	81.775	1.00	48.08
320	C	PHE	A	165	-6.665	11.709	79.743	1.00	42.46
321	O	PHE	A	165	-7.788	11.832	80.199	1.00	40.57
322	N	LYS	A	166	-6.360	10.867	78.768	1.00	43.35
323	CA	LYS	A	166	-7.342	9.957	78.209	1.00	45.50
324	CB	LYS	A	166	-6.696	9.043	77.155	1.00	46.27
325	CG	LYS	A	166	-6.559	9.666	75.786	1.00	46.27
326	CD	LYS	A	166	-5.423	8.956	75.032	1.00	53.89
327	CE	LYS	A	166	-5.279	9.445	73.581	1.00	55.13
328	NZ	LYS	A	166	-5.709	8.444	72.569	1.00	59.86
329	C	LYS	A	166	-8.040	9.102	79.273	1.00	45.98
330	O	LYS	A	166	-9.230	8.981	79.250	1.00	46.56
331	N	ALA	A	167	-7.324	8.561	80.240	1.00	47.94
332	CA	ALA	A	167	-8.025	7.699	81.191	1.00	49.17
333	CB	ALA	A	167	-7.091	7.201	82.220	1.00	49.16
334	C	ALA	A	167	-9.168	8.457	81.848	1.00	49.92
335	O	ALA	A	167	-10.305	7.957	81.995	1.00	49.78
336	N	GLN	A	168	-8.859	9.696	82.218	1.00	49.84
337	CA	GLN	A	168	-9.787	10.502	82.960	1.00	49.29
338	CB	GLN	A	168	-9.058	11.694	83.591	1.00	50.22
339	CG	GLN	A	168	-8.451	11.419	84.993	1.00	54.78
340	CD	GLN	A	168	-7.028	10.830	84.965	1.00	62.45
341	OE1	GLN	A	168	-6.053	11.569	84.788	1.00	65.02
342	NE2	GLN	A	168	-6.908	9.511	85.190	1.00	64.80
343	C	GLN	A	168	-10.953	10.939	82.088	1.00	48.29
344	O	GLN	A	168	-12.085	10.976	82.553	1.00	47.87
345	N	LEU	A	169	-10.702	11.245	80.814	1.00	48.22
346	CA	LEU	A	169	-11.808	11.676	79.964	1.00	48.39
347	CB	LEU	A	169	-11.322	12.112	78.575	1.00	47.89

FIGURE 3G

A	B	C	D	E	F	G	H	I	J
348	CG	LEU	A	169	-10.644	13.461	78.330	1.00	49.67
349	CD1	LEU	A	169	-10.181	13.552	76.882	1.00	48.91
350	CD2	LEU	A	169	-11.615	14.580	78.615	1.00	45.84
351	C	LEU	A	169	-12.819	10.538	79.785	1.00	47.86
352	O	LEU	A	169	-14.027	10.733	79.875	1.00	47.83
353	N	ALA	A	170	-12.316	9.368	79.451	1.00	48.31
354	CA	ALA	A	170	-13.220	8.238	79.195	1.00	48.55
355	CB	ALA	A	170	-12.468	7.070	78.581	1.00	49.34
356	C	ALA	A	170	-13.927	7.860	80.494	1.00	48.26
357	O	ALA	A	170	-15.118	7.692	80.501	1.00	49.17
358	N	ALA	A	171	-13.207	7.806	81.606	1.00	48.63
359	CA	ALA	A	171	-13.857	7.578	82.885	1.00	48.78
360	CB	ALA	A	171	-12.858	7.685	84.058	1.00	49.66
361	C	ALA	A	171	-14.996	8.561	83.082	1.00	48.71
362	O	ALA	A	171	-16.113	8.179	83.429	1.00	48.35
363	N	ALA	A	172	-14.723	9.841	82.844	1.00	48.29
364	CA	ALA	A	172	-15.740	10.846	83.012	1.00	47.44
365	CB	ALA	A	172	-15.093	12.246	83.064	1.00	48.07
366	C	ALA	A	172	-16.759	10.737	81.888	1.00	47.98
367	O	ALA	A	172	-17.893	11.232	81.984	1.00	48.40
368	N	GLY	A	173	-16.371	10.067	80.815	1.00	48.12
369	CA	GLY	A	173	-17.262	9.907	79.674	1.00	47.85
370	C	GLY	A	173	-17.733	11.166	78.995	1.00	47.73
371	O	GLY	A	173	-18.926	11.308	78.705	1.00	49.07
372	N	VAL	A	174	-16.790	12.075	78.736	1.00	46.88
373	CA	VAL	A	174	-17.030	13.322	78.021	1.00	45.99
374	CB	VAL	A	174	-16.674	14.572	78.873	1.00	45.74
375	CG1	VAL	A	174	-17.722	14.810	79.913	1.00	49.76
376	CG2	VAL	A	174	-15.330	14.425	79.472	1.00	46.00
377	C	VAL	A	174	-16.132	13.394	76.798	1.00	44.25
378	O	VAL	A	174	-15.792	14.483	76.300	1.00	43.32
379	N	ALA	A	175	-15.708	12.236	76.322	1.00	42.33
380	CA	ALA	A	175	-14.879	12.221	75.125	1.00	41.82
381	CB	ALA	A	175	-14.563	10.748	74.679	1.00	41.75
382	C	ALA	A	175	-15.577	13.026	74.008	1.00	40.98
383	O	ALA	A	175	-14.920	13.683	73.189	1.00	42.44
384	N	HIS	A	176	-16.899	13.030	74.009	1.00	40.16
385	CA	HIS	A	176	-17.657	13.751	72.980	1.00	41.39
386	CB	HIS	A	176	-19.146	13.385	73.068	1.00	41.58
387	CG	HIS	A	176	-19.803	13.903	74.318	1.00	45.86
388	ND1	HIS	A	176	-19.695	13.259	75.543	1.00	47.14
389	CE1	HIS	A	176	-20.355	13.949	76.460	1.00	47.79
390	NE2	HIS	A	176	-20.854	15.035	75.885	1.00	49.44
391	CD2	HIS	A	176	-20.532	15.023	74.545	1.00	46.34
392	C	HIS	A	176	-17.477	15.312	73.096	1.00	40.21
393	O	HIS	A	176	-17.529	16.043	72.107	1.00	38.56
394	N	GLN	A	177	-17.282	15.793	74.320	1.00	39.05
395	CA	GLN	A	177	-17.021	17.231	74.544	1.00	39.77
396	CB	GLN	A	177	-17.008	17.567	76.019	1.00	38.88
397	CG	GLN	A	177	-18.343	17.312	76.675	1.00	38.17
398	CD	GLN	A	177	-18.467	17.978	78.032	1.00	36.45

FIGURE 3H

A	B	C	D	E	F	G	H	I	J
399	OE1	GLN	A	177	-19.540	18.436	78.382	1.00	43.55
400	NE2	GLN	A	177	-17.393	17.992	78.801	1.00	32.42
401	C	GLN	A	177	-15.672	17.586	73.966	1.00	39.55
402	O	GLN	A	177	-15.519	18.636	73.379	1.00	40.58
403	N	LEU	A	178	-14.691	16.722	74.144	1.00	38.53
404	CA	LEU	A	178	-13.396	17.016	73.556	1.00	38.40
405	CB	LEU	A	178	-12.332	16.028	73.974	1.00	37.56
406	CG	LEU	A	178	-10.937	16.463	73.548	1.00	39.19
407	CD1	LEU	A	178	-10.647	17.912	74.074	1.00	42.88
408	CD2	LEU	A	178	-9.892	15.543	74.112	1.00	42.48
409	C	LEU	A	178	-13.537	17.041	72.039	1.00	38.85
410	O	LEU	A	178	-12.977	17.902	71.384	1.00	38.48
411	N	ARG	A	179	-14.362	16.156	71.478	1.00	38.80
412	CA	ARG	A	179	-14.528	16.156	70.027	1.00	38.95
413	CB	ARG	A	179	-15.552	15.134	69.583	1.00	41.23
414	CG	ARG	A	179	-15.211	14.622	68.199	1.00	45.48
415	CD	ARG	A	179	-15.384	13.090	68.099	1.00	56.58
416	NE	ARG	A	179	-16.441	12.637	69.012	1.00	57.68
417	CZ	ARG	A	179	-16.275	11.730	69.973	1.00	57.26
418	NH1	ARG	A	179	-17.291	11.381	70.749	1.00	53.81
419	NH2	ARG	A	179	-15.093	11.162	70.159	1.00	59.58
420	C	ARG	A	179	-15.092	17.456	69.558	1.00	38.62
421	O	ARG	A	179	-14.762	17.995	68.508	1.00	38.21
422	N	ARG	A	180	-16.042	17.943	70.318	1.00	39.35
423	CA	ARG	A	180	-16.739	19.126	69.851	1.00	41.02
424	CB	ARG	A	180	-18.096	19.338	70.575	1.00	41.10
425	CG	ARG	A	180	-19.359	19.248	69.686	1.00	48.65
426	CD	ARG	A	180	-20.364	18.182	70.125	1.00	56.75
427	NE	ARG	A	180	-20.662	18.254	71.551	1.00	60.82
428	CZ	ARG	A	180	-21.716	17.672	72.127	1.00	64.30
429	NH1	ARG	A	180	-21.941	17.819	73.430	1.00	64.17
430	NH2	ARG	A	180	-22.566	16.958	71.400	1.00	65.87
431	C	ARG	A	180	-15.888	20.374	69.923	1.00	39.65
432	O	ARG	A	180	-15.924	21.204	69.026	1.00	38.25
433	N	GLU	A	181	-15.136	20.501	71.003	1.00	39.01
434	CA	GLU	A	181	-14.302	21.665	71.254	1.00	38.98
435	CB	GLU	A	181	-13.453	21.368	72.514	1.00	39.58
436	CG	GLU	A	181	-12.421	22.429	72.937	1.00	41.25
437	CD	GLU	A	181	-11.926	22.254	74.396	1.00	44.88
438	OE1	GLU	A	181	-10.944	22.921	74.792	1.00	48.21
439	OE2	GLU	A	181	-12.528	21.477	75.192	1.00	45.90
440	C	GLU	A	181	-13.361	21.802	70.074	1.00	38.90
441	O	GLU	A	181	-13.111	22.894	69.576	1.00	38.31
442	N	VAL	A	182	-12.803	20.667	69.651	1.00	38.34
443	CA	VAL	A	182	-11.850	20.639	68.537	1.00	38.73
444	CB	VAL	A	182	-11.090	19.274	68.390	1.00	40.09
445	CG1	VAL	A	182	-10.416	19.128	66.980	1.00	40.39
446	CG2	VAL	A	182	-10.051	19.079	69.506	1.00	38.26
447	C	VAL	A	182	-12.541	20.959	67.237	1.00	38.65
448	O	VAL	A	182	-12.119	21.839	66.516	1.00	39.07
449	N	ALA	A	183	-13.656	20.285	66.957	1.00	39.36

FIGURE 3I

A	B	C	D	E	F	G	H	I	J
450	CA	ALA	A	183	-14.312	20.503	65.679	1.00	40.14
451	CB	ALA	A	183	-15.334	19.370	65.405	1.00	41.08
452	C	ALA	A	183	-14.965	21.870	65.636	1.00	40.80
453	O	ALA	A	183	-14.972	22.545	64.609	1.00	41.84
454	N	ILE	A	184	-15.524	22.312	66.748	1.00	38.99
455	CA	ILE	A	184	-16.157	23.595	66.678	1.00	39.48
456	CB	ILE	A	184	-17.210	23.754	67.766	1.00	38.90
457	CG1	ILE	A	184	-18.387	22.819	67.472	1.00	42.19
458	CD1	ILE	A	184	-19.459	22.799	68.584	1.00	40.68
459	CG2	ILE	A	184	-17.715	25.164	67.777	1.00	40.73
460	C	ILE	A	184	-15.124	24.703	66.747	1.00	39.32
461	O	ILE	A	184	-15.148	25.635	65.929	1.00	38.88
462	N	GLN	A	185	-14.209	24.612	67.723	1.00	38.82
463	CA	GLN	A	185	-13.281	25.717	67.911	1.00	38.20
464	CB	GLN	A	185	-12.446	25.531	69.185	1.00	38.61
465	CG	GLN	A	185	-12.426	26.806	70.015	1.00	36.79
466	CD	GLN	A	185	-11.623	26.663	71.277	1.00	38.97
467	OE1	GLN	A	185	-10.817	27.519	71.599	1.00	35.32
468	NE2	GLN	A	185	-11.869	25.627	71.997	1.00	32.38
469	C	GLN	A	185	-12.337	25.905	66.754	1.00	38.81
470	O	GLN	A	185	-11.936	27.027	66.479	1.00	37.38
471	N	SER	A	186	-11.946	24.823	66.083	1.00	39.57
472	CA	SER	A	186	-10.957	25.005	65.007	1.00	41.86
473	CB	SER	A	186	-10.302	23.684	64.569	1.00	41.93
474	OG	SER	A	186	-11.289	22.671	64.412	1.00	42.48
475	C	SER	A	186	-11.509	25.748	63.798	1.00	42.50
476	O	SER	A	186	-10.761	26.297	63.017	1.00	43.08
477	N	HIS	A	187	-12.817	25.781	63.656	1.00	43.53
478	CA	HIS	A	187	-13.397	26.411	62.471	1.00	45.61
479	CB	HIS	A	187	-14.585	25.580	61.955	1.00	46.41
480	CG	HIS	A	187	-14.173	24.264	61.396	1.00	52.65
481	ND1	HIS	A	187	-14.352	23.934	60.072	1.00	58.39
482	CE1	HIS	A	187	-13.863	22.725	59.855	1.00	58.68
483	NE2	HIS	A	187	-13.354	22.269	60.986	1.00	59.03
484	CD2	HIS	A	187	-13.527	23.215	61.965	1.00	56.31
485	C	HIS	A	187	-13.815	27.843	62.684	1.00	44.76
486	O	HIS	A	187	-13.962	28.608	61.725	1.00	44.78
487	N	LEU	A	188	-13.984	28.229	63.945	1.00	44.38
488	CA	LEU	A	188	-14.351	29.612	64.257	1.00	43.43
489	CB	LEU	A	188	-14.767	29.748	65.747	1.00	43.01
490	CG	LEU	A	188	-15.964	28.891	66.146	1.00	43.56
491	CD1	LEU	A	188	-16.328	29.051	67.640	1.00	41.71
492	CD2	LEU	A	188	-17.109	29.282	65.302	1.00	41.54
493	C	LEU	A	188	-13.143	30.477	64.001	1.00	42.37
494	O	LEU	A	188	-12.036	30.079	64.321	1.00	43.11
495	N	ARG	A	189	-13.365	31.677	63.478	1.00	42.12
496	CA	ARG	A	189	-12.293	32.644	63.200	1.00	42.01
497	CB	ARG	A	189	-11.962	32.682	61.695	1.00	42.31
498	CG	ARG	A	189	-11.239	31.477	61.229	1.00	44.33
499	CD	ARG	A	189	-9.871	31.267	61.898	1.00	46.81
500	NE	ARG	A	189	-9.128	30.280	61.109	1.00	54.20

FIGURE 3J

A	B	C	D	E	F	G	H	I	J
501	CZ	ARG	A	189	-9.335	28.979	61.187	1.00	56.68
502	NH1	ARG	A	189	-8.643	28.153	60.419	1.00	58.82
503	NH2	ARG	A	189	-10.230	28.496	62.049	1.00	57.84
504	C	ARG	A	189	-12.809	34.010	63.580	1.00	41.15
505	O	ARG	A	189	-13.554	34.620	62.819	1.00	41.64
506	N	HIS	A	190	-12.402	34.506	64.739	1.00	40.04
507	CA	HIS	A	190	-12.901	35.775	65.194	1.00	38.65
508	CB	HIS	A	190	-14.316	35.605	65.760	1.00	38.81
509	CG	HIS	A	190	-14.925	36.886	66.202	1.00	39.63
510	ND1	HIS	A	190	-15.866	37.557	65.454	1.00	40.19
511	CE1	HIS	A	190	-16.189	38.680	66.071	1.00	37.93
512	NE2	HIS	A	190	-15.486	38.762	67.184	1.00	36.58
513	CD2	HIS	A	190	-14.671	37.664	67.284	1.00	33.70
514	C	HIS	A	190	-11.906	36.363	66.185	1.00	37.98
515	O	HIS	A	190	-11.329	35.649	66.986	1.00	38.30
516	N	PRO	A	191	-11.640	37.657	66.113	1.00	38.45
517	CA	PRO	A	191	-10.581	38.239	66.953	1.00	36.82
518	CB	PRO	A	191	-10.615	39.701	66.553	1.00	37.97
519	CG	PRO	A	191	-12.033	39.881	66.066	1.00	38.87
520	CD	PRO	A	191	-12.253	38.668	65.234	1.00	38.97
521	C	PRO	A	191	-10.903	38.055	68.457	1.00	35.66
522	O	PRO	A	191	-9.992	38.127	69.276	1.00	34.96
523	N	ASN	A	192	-12.158	37.814	68.804	1.00	34.30
524	CA	ASN	A	192	-12.523	37.581	70.217	1.00	33.52
525	CB	ASN	A	192	-13.612	38.556	70.663	1.00	32.97
526	CG	ASN	A	192	-13.207	40.027	70.497	1.00	35.71
527	OD1	ASN	A	192	-12.286	40.503	71.178	1.00	35.61
528	ND2	ASN	A	192	-13.823	40.714	69.556	1.00	31.27
529	C	ASN	A	192	-12.871	36.123	70.646	1.00	32.20
530	O	ASN	A	192	-13.603	35.887	71.624	1.00	31.19
531	N	ILE	A	193	-12.368	35.159	69.890	1.00	30.72
532	CA	ILE	A	193	-12.535	33.743	70.202	1.00	31.30
533	CB	ILE	A	193	-13.428	33.071	69.151	1.00	31.25
534	CG1	ILE	A	193	-14.862	33.600	69.252	1.00	32.94
535	CD1	ILE	A	193	-15.777	33.149	68.134	1.00	36.50
536	CG2	ILE	A	193	-13.371	31.550	69.293	1.00	29.33
537	C	ILE	A	193	-11.166	33.124	70.102	1.00	30.85
538	O	ILE	A	193	-10.472	33.376	69.121	1.00	31.20
539	N	LEU	A	194	-10.764	32.311	71.085	1.00	29.48
540	CA	LEU	A	194	-9.497	31.652	71.065	1.00	30.26
541	CB	LEU	A	194	-9.165	31.043	72.422	1.00	28.89
542	CG	LEU	A	194	-7.685	30.760	72.565	1.00	31.38
543	CD1	LEU	A	194	-6.957	32.083	72.928	1.00	27.79
544	CD2	LEU	A	194	-7.565	29.741	73.655	1.00	30.09
545	C	LEU	A	194	-9.417	30.580	69.984	1.00	30.59
546	O	LEU	A	194	-10.224	29.651	69.930	1.00	31.64
547	N	ARG	A	195	-8.411	30.745	69.139	1.00	31.20
548	CA	ARG	A	195	-8.121	29.904	68.003	1.00	32.25
549	CB	ARG	A	195	-7.026	30.648	67.258	1.00	33.95
550	CG	ARG	A	195	-6.742	30.234	65.886	1.00	42.54
551	CD	ARG	A	195	-7.805	30.522	64.863	1.00	46.96

FIGURE 3K

A	B	C	D	E	F	G	H	I	J
552	NE	ARG	A	195	-7.275	29.900	63.663	1.00	52.66
553	CZ	ARG	A	195	-6.358	30.480	62.912	1.00	56.14
554	NH1	ARG	A	195	-5.941	31.694	63.224	1.00	56.04
555	NH2	ARG	A	195	-5.861	29.867	61.844	1.00	60.45
556	C	ARG	A	195	-7.580	28.611	68.529	1.00	30.98
557	O	ARG	A	195	-6.771	28.614	69.450	1.00	28.95
558	N	LEU	A	196	-8.015	27.509	67.984	1.00	31.25
559	CA	LEU	A	196	-7.440	26.226	68.277	1.00	31.50
560	CB	LEU	A	196	-8.517	25.265	68.720	1.00	32.30
561	CG	LEU	A	196	-8.057	23.870	69.131	1.00	33.64
562	CD1	LEU	A	196	-9.058	23.370	70.151	1.00	36.24
563	CD2	LEU	A	196	-8.117	23.052	67.904	1.00	34.95
564	C	LEU	A	196	-6.795	25.867	66.932	1.00	35.11
565	O	LEU	A	196	-7.445	25.957	65.875	1.00	34.69
566	N	TYR	A	197	-5.509	25.518	66.972	1.00	36.02
567	CA	TYR	A	197	-4.765	25.276	65.763	1.00	37.91
568	CB	TYR	A	197	-3.331	25.747	65.950	1.00	39.49
569	CG	TYR	A	197	-3.243	27.233	66.128	1.00	40.35
570	CD1	TYR	A	197	-2.704	27.782	67.278	1.00	43.33
571	CE1	TYR	A	197	-2.619	29.122	67.439	1.00	43.54
572	CZ	TYR	A	197	-3.072	29.953	66.451	1.00	44.37
573	OH	TYR	A	197	-2.949	31.310	66.604	1.00	48.37
574	CE2	TYR	A	197	-3.603	29.455	65.296	1.00	45.10
575	CD2	TYR	A	197	-3.697	28.087	65.139	1.00	44.72
576	C	TYR	A	197	-4.762	23.826	65.380	1.00	38.77
577	O	TYR	A	197	-4.536	23.490	64.216	1.00	39.64
578	N	GLY	A	198	-4.976	22.955	66.351	1.00	37.60
579	CA	GLY	A	198	-5.013	21.553	66.019	1.00	38.52
580	C	GLY	A	198	-4.785	20.771	67.265	1.00	38.86
581	O	GLY	A	198	-4.900	21.311	68.409	1.00	36.64
582	N	TYR	A	199	-4.428	19.511	67.066	1.00	38.68
583	CA	TYR	A	199	-4.334	18.597	68.185	1.00	40.56
584	CB	TYR	A	199	-5.731	18.163	68.637	1.00	39.96
585	CG	TYR	A	199	-6.334	17.067	67.753	1.00	44.40
586	CD1	TYR	A	199	-7.074	17.385	66.618	1.00	44.98
587	CE1	TYR	A	199	-7.626	16.382	65.807	1.00	48.78
588	CZ	TYR	A	199	-7.420	15.058	66.132	1.00	50.76
589	OH	TYR	A	199	-7.947	14.040	65.357	1.00	58.47
590	CE2	TYR	A	199	-6.697	14.722	67.244	1.00	51.67
591	CD2	TYR	A	199	-6.160	15.736	68.060	1.00	46.05
592	C	TYR	A	199	-3.517	17.369	67.877	1.00	40.55
593	O	TYR	A	199	-3.291	17.055	66.728	1.00	40.45
594	N	PHE	A	200	-3.066	16.670	68.911	1.00	40.86
595	CA	PHE	A	200	-2.416	15.411	68.656	1.00	42.07
596	CB	PHE	A	200	-0.963	15.636	68.198	1.00	41.03
597	CG	PHE	A	200	-0.122	16.422	69.173	1.00	44.63
598	CD1	PHE	A	200	0.713	15.760	70.035	1.00	42.87
599	CE1	PHE	A	200	1.515	16.436	70.934	1.00	44.73
600	CZ	PHE	A	200	1.477	17.801	71.010	1.00	43.50
601	CE2	PHE	A	200	0.655	18.492	70.162	1.00	43.78
602	CD2	PHE	A	200	-0.191	17.817	69.254	1.00	43.04

FIGURE 3L

A	B	C	D	E	F	G	H	I	J
603	C	PHE	A	200	-2.610	14.522	69.888	1.00	42.82
604	O	PHE	A	200	-3.188	14.961	70.897	1.00	39.88
605	N	HIS	A	201	-2.268	13.251	69.770	1.00	44.66
606	CA	HIS	A	201	-2.394	12.350	70.911	1.00	48.80
607	CB	HIS	A	201	-3.807	11.739	70.991	1.00	49.16
608	CG	HIS	A	201	-4.132	10.793	69.870	1.00	53.25
609	ND1	HIS	A	201	-3.940	9.429	69.956	1.00	57.68
610	CE1	HIS	A	201	-4.339	8.855	68.832	1.00	58.86
611	NE2	HIS	A	201	-4.794	9.797	68.024	1.00	58.83
612	CD2	HIS	A	201	-4.676	11.018	68.650	1.00	57.09
613	C	HIS	A	201	-1.323	11.281	70.980	1.00	49.89
614	O	HIS	A	201	-0.807	10.810	69.960	1.00	50.59
615	N	ASP	A	202	-0.983	10.943	72.219	1.00	52.70
616	CA	ASP	A	202	-0.084	9.828	72.492	1.00	53.99
617	CB	ASP	A	202	1.241	10.287	73.079	1.00	54.12
618	CG	ASP	A	202	1.098	10.887	74.444	1.00	55.69
619	OD1	ASP	A	202	0.064	10.619	75.099	1.00	54.93
620	OD2	ASP	A	202	2.000	11.609	74.943	1.00	54.23
621	C	ASP	A	202	-0.819	8.790	73.330	1.00	54.16
622	O	ASP	A	202	-2.064	8.730	73.308	1.00	54.26
623	N	ALA	A	203	-0.084	7.976	74.067	1.00	54.51
624	CA	ALA	A	203	-0.738	6.843	74.732	1.00	54.56
625	CB	ALA	A	203	0.314	5.869	75.285	1.00	54.78
626	C	ALA	A	203	-1.716	7.242	75.824	1.00	54.14
627	O	ALA	A	203	-2.869	6.753	75.887	1.00	54.14
628	N	THR	A	204	-1.254	8.141	76.681	1.00	52.74
629	CA	THR	A	204	-2.040	8.535	77.833	1.00	51.77
630	CB	THR	A	204	-1.114	8.467	79.073	1.00	52.77
631	OG1	THR	A	204	-1.821	8.827	80.286	1.00	56.55
632	CG2	THR	A	204	-0.003	9.483	78.940	1.00	51.61
633	C	THR	A	204	-2.689	9.929	77.704	1.00	50.02
634	O	THR	A	204	-3.546	10.290	78.496	1.00	48.39
635	N	ARG	A	205	-2.312	10.702	76.693	1.00	48.75
636	CA	ARG	A	205	-2.797	12.093	76.643	1.00	47.39
637	CB	ARG	A	205	-1.740	13.047	77.192	1.00	47.22
638	CG	ARG	A	205	-1.295	12.746	78.573	1.00	50.14
639	CD	ARG	A	205	0.224	12.732	78.698	1.00	59.09
640	NE	ARG	A	205	0.805	13.946	79.262	1.00	65.81
641	CZ	ARG	A	205	2.118	14.116	79.455	1.00	71.17
642	NH1	ARG	A	205	2.587	15.256	79.974	1.00	73.74
643	NH2	ARG	A	205	2.968	13.142	79.123	1.00	72.85
644	C	ARG	A	205	-3.228	12.598	75.293	1.00	44.76
645	O	ARG	A	205	-2.831	12.070	74.258	1.00	44.49
646	N	VAL	A	206	-4.119	13.582	75.354	1.00	42.03
647	CA	VAL	A	206	-4.578	14.339	74.206	1.00	40.02
648	CB	VAL	A	206	-6.136	14.273	74.061	1.00	40.51
649	CG1	VAL	A	206	-6.638	15.182	72.954	1.00	41.85
650	CG2	VAL	A	206	-6.580	12.851	73.737	1.00	41.32
651	C	VAL	A	206	-4.039	15.785	74.414	1.00	38.80
652	O	VAL	A	206	-3.996	16.298	75.539	1.00	38.31
653	N	TYR	A	207	-3.593	16.409	73.341	1.00	37.44
654	CA	TYR	A	207	-2.976	17.737	73.430	1.00	38.03

FIGURE 3M

A	B	C	D	E	F	G	H	I	J
655	CB	TYR	A	207	-1.549	17.670	72.968	1.00	36.40
656	CG	TYR	A	207	-0.688	16.778	73.766	1.00	39.00
657	CD1	TYR	A	207	-0.010	17.249	74.881	1.00	39.70
658	CE1	TYR	A	207	0.818	16.417	75.590	1.00	44.38
659	CZ	TYR	A	207	0.948	15.092	75.187	1.00	45.91
660	OH	TYR	A	207	1.734	14.246	75.900	1.00	50.45
661	CE2	TYR	A	207	0.290	14.609	74.090	1.00	43.62
662	CD2	TYR	A	207	-0.539	15.439	73.398	1.00	40.40
663	C	TYR	A	207	-3.595	18.728	72.511	1.00	37.21
664	O	TYR	A	207	-3.384	18.643	71.286	1.00	39.25
665	N	LEU	A	208	-4.323	19.685	73.049	1.00	35.21
666	CA	LEU	A	208	-4.858	20.693	72.172	1.00	32.76
667	CB	LEU	A	208	-6.177	21.235	72.710	1.00	32.84
668	CG	LEU	A	208	-7.403	20.429	72.312	1.00	36.54
669	CD1	LEU	A	208	-7.148	18.880	72.249	1.00	39.94
670	CD2	LEU	A	208	-8.584	20.792	73.169	1.00	34.97
671	C	LEU	A	208	-3.851	21.827	71.975	1.00	31.94
672	O	LEU	A	208	-3.292	22.378	72.960	1.00	31.89
673	N	ILE	A	209	-3.605	22.175	70.710	1.00	27.64
674	CA	ILE	A	209	-2.719	23.286	70.374	1.00	29.03
675	CB	ILE	A	209	-2.034	23.047	69.043	1.00	29.46
676	CG1	ILE	A	209	-1.424	21.632	68.983	1.00	33.03
677	CD1	ILE	A	209	-0.629	21.353	67.616	1.00	36.54
678	CG2	ILE	A	209	-0.996	24.092	68.833	1.00	27.57
679	C	ILE	A	209	-3.518	24.572	70.249	1.00	29.27
680	O	ILE	A	209	-4.206	24.763	69.258	1.00	30.08
681	N	LEU	A	210	-3.372	25.462	71.226	1.00	27.89
682	CA	LEU	A	210	-4.143	26.671	71.304	1.00	28.36
683	CB	LEU	A	210	-4.768	26.757	72.729	1.00	26.97
684	CG	LEU	A	210	-5.603	25.569	73.209	1.00	31.79
685	CD1	LEU	A	210	-6.165	25.926	74.613	1.00	31.27
686	CD2	LEU	A	210	-6.798	25.282	72.204	1.00	34.08
687	C	LEU	A	210	-3.346	27.967	71.066	1.00	26.61
688	O	LEU	A	210	-2.177	28.060	71.382	1.00	27.93
689	N	GLU	A	211	-3.994	28.972	70.520	1.00	29.15
690	CA	GLU	A	211	-3.501	30.350	70.621	1.00	29.81
691	CB	GLU	A	211	-4.498	31.350	70.047	1.00	31.22
692	CG	GLU	A	211	-3.984	32.779	70.020	1.00	35.70
693	CD	GLU	A	211	-5.147	33.799	70.050	1.00	39.08
694	OE1	GLU	A	211	-4.932	34.950	70.489	1.00	43.39
695	OE2	GLU	A	211	-6.288	33.455	69.653	1.00	38.36
696	C	GLU	A	211	-3.161	30.663	72.128	1.00	29.58
697	O	GLU	A	211	-3.948	30.404	73.014	1.00	28.54
698	N	TYR	A	212	-1.957	31.153	72.381	1.00	28.23
699	CA	TYR	A	212	-1.550	31.606	73.725	1.00	28.20
700	CB	TYR	A	212	-0.028	31.697	73.739	1.00	28.08
701	CG	TYR	A	212	0.592	32.494	74.874	1.00	29.44
702	CD1	TYR	A	212	1.521	33.489	74.601	1.00	30.49
703	CE1	TYR	A	212	2.131	34.197	75.639	1.00	36.30
704	CZ	TYR	A	212	1.773	33.945	76.903	1.00	33.49
705	OH	TYR	A	212	2.383	34.655	77.887	1.00	37.20

FIGURE 3N

A	B	C	D	E	F	G	H	I	J
706	CE2	TYR	A	212	0.802	32.977	77.225	1.00	33.16
707	CD2	TYR	A	212	0.234	32.258	76.188	1.00	28.40
708	C	TYR	A	212	-2.183	33.022	74.034	1.00	28.48
709	O	TYR	A	212	-2.089	33.924	73.211	1.00	27.53
710	N	ALA	A	213	-2.836	33.156	75.205	1.00	28.23
711	CA	ALA	A	213	-3.431	34.424	75.650	1.00	30.33
712	CB	ALA	A	213	-4.884	34.284	76.103	1.00	28.94
713	C	ALA	A	213	-2.550	34.953	76.780	1.00	30.02
714	O	ALA	A	213	-2.634	34.540	77.872	1.00	31.02
715	N	PRO	A	214	-1.720	35.904	76.442	1.00	31.54
716	CA	PRO	A	214	-0.632	36.365	77.313	1.00	32.57
717	CB	PRO	A	214	0.219	37.264	76.395	1.00	32.48
718	CG	PRO	A	214	-0.495	37.305	75.047	1.00	35.80
719	CD	PRO	A	214	-1.853	36.639	75.171	1.00	30.79
720	C	PRO	A	214	-1.070	37.096	78.596	1.00	34.06
721	O	PRO	A	214	-0.408	36.972	79.644	1.00	35.53
722	N	LEU	A	215	-2.187	37.789	78.548	1.00	33.98
723	CA	LEU	A	215	-2.641	38.503	79.718	1.00	36.04
724	CB	LEU	A	215	-3.341	39.786	79.296	1.00	34.70
725	CG	LEU	A	215	-2.394	41.003	79.195	1.00	36.83
726	CD1	LEU	A	215	-1.157	40.725	78.377	1.00	35.83
727	CD2	LEU	A	215	-3.180	42.190	78.627	1.00	35.88
728	C	LEU	A	215	-3.521	37.689	80.677	1.00	35.81
729	O	LEU	A	215	-4.121	38.247	81.571	1.00	35.82
730	N	GLY	A	216	-3.603	36.381	80.470	1.00	35.32
731	CA	GLY	A	216	-4.326	35.503	81.372	1.00	34.32
732	C	GLY	A	216	-5.848	35.530	81.287	1.00	32.64
733	O	GLY	A	216	-6.426	35.895	80.257	1.00	32.48
734	N	THR	A	217	-6.500	35.138	82.367	1.00	31.56
735	CA	THR	A	217	-7.962	35.119	82.396	1.00	31.29
736	CB	THR	A	217	-8.511	33.951	83.212	1.00	32.13
737	OG1	THR	A	217	-8.082	34.088	84.587	1.00	30.67
738	CG2	THR	A	217	-7.974	32.629	82.730	1.00	31.12
739	C	THR	A	217	-8.613	36.355	83.020	1.00	31.68
740	O	THR	A	217	-8.041	37.069	83.856	1.00	28.84
741	N	VAL	A	218	-9.881	36.498	82.686	1.00	30.86
742	CA	VAL	A	218	-10.694	37.528	83.283	1.00	32.14
743	CB	VAL	A	218	-11.953	37.675	82.526	1.00	33.13
744	CG1	VAL	A	218	-12.978	38.466	83.328	1.00	35.75
745	CG2	VAL	A	218	-11.616	38.289	81.172	1.00	31.98
746	C	VAL	A	218	-10.920	37.150	84.768	1.00	32.06
747	O	VAL	A	218	-11.039	38.023	85.642	1.00	32.00
748	N	TYR	A	219	-10.958	35.849	85.032	1.00	32.11
749	CA	TYR	A	219	-11.062	35.374	86.402	1.00	33.66
750	CB	TYR	A	219	-11.049	33.838	86.406	1.00	33.98
751	CG	TYR	A	219	-11.116	33.234	87.785	1.00	35.91
752	CD1	TYR	A	219	-12.335	32.895	88.354	1.00	38.53
753	CD1	TYR	A	219	-12.412	32.339	89.620	1.00	46.18
754	CZ	TYR	A	219	-11.236	32.109	90.335	1.00	47.58
755	OH	TYR	A	219	-11.326	31.532	91.592	1.00	53.35
756	CE2	TYR	A	219	-10.001	32.451	89.785	1.00	42.92

FIGURE 30

A	B	C	D	E	F	G	H	I	J
757	CD2	TYR	A	219	-9.954	32.999	88.517	1.00	37.24
758	C	TYR	A	219	-9.883	35.936	87.269	1.00	33.62
759	O	TYR	A	219	-10.105	36.423	88.379	1.00	33.27
760	N	ARG	A	220	-8.703	35.924	86.725	1.00	34.37
761	CA	ARG	A	220	-7.506	36.322	87.508	1.00	36.06
762	CB	ARG	A	220	-6.243	35.827	86.810	1.00	37.28
763	CG	ARG	A	220	-5.058	35.372	87.750	1.00	44.07
764	CD	ARG	A	220	-3.665	35.138	87.075	1.00	53.39
765	NE	ARG	A	220	-3.131	36.401	86.587	1.00	57.56
766	CZ	ARG	A	220	-3.067	36.736	85.300	1.00	63.45
767	NH1	ARG	A	220	-2.583	37.921	84.937	1.00	62.86
768	NH2	ARG	A	220	-3.473	35.882	84.365	1.00	65.24
769	C	ARG	A	220	-7.561	37.846	87.621	1.00	35.84
770	O	ARG	A	220	-7.328	38.467	88.683	1.00	34.61
771	N	GLU	A	221	-7.928	38.427	86.490	1.00	35.98
772	CA	GLU	A	221	-8.145	39.852	86.355	1.00	38.35
773	CB	GLU	A	221	-8.573	40.154	84.930	1.00	39.07
774	CG	GLU	A	221	-8.452	41.597	84.521	1.00	47.19
775	CD	GLU	A	221	-7.205	42.221	85.080	1.00	57.25
776	OE1	GLU	A	221	-6.259	42.459	84.291	1.00	60.27
777	OE2	GLU	A	221	-7.178	42.474	86.314	1.00	62.91
778	C	GLU	A	221	-9.149	40.339	87.416	1.00	38.74
779	O	GLU	A	221	-8.832	41.307	88.117	1.00	38.67
780	N	LEU	A	222	-10.296	39.663	87.575	1.00	37.69
781	CA	LEU	A	222	-11.188	40.011	88.668	1.00	39.29
782	CB	LEU	A	222	-12.513	39.256	88.615	1.00	40.21
783	CG	LEU	A	222	-13.754	39.901	88.040	1.00	44.66
784	CD1	LEU	A	222	-13.892	41.386	88.378	1.00	44.76
785	CD2	LEU	A	222	-13.856	39.644	86.553	1.00	52.48
786	C	LEU	A	222	-10.654	39.766	90.079	1.00	40.79
787	O	LEU	A	222	-10.981	40.510	91.025	1.00	40.30
788	N	GLN	A	223	-9.904	38.712	90.272	1.00	40.08
789	CA	GLN	A	223	-9.456	38.509	91.612	1.00	43.39
790	CB	GLN	A	223	-9.120	37.025	91.889	1.00	44.71
791	CG	GLN	A	223	-7.754	36.535	91.538	1.00	49.87
792	CD	GLN	A	223	-7.627	34.996	91.712	1.00	56.56
793	OE1	GLN	A	223	-6.942	34.309	90.918	1.00	58.11
794	NE2	GLN	A	223	-8.286	34.460	92.747	1.00	58.77
795	C	GLN	A	223	-8.380	39.560	91.978	1.00	43.05
796	O	GLN	A	223	-8.307	39.976	93.113	1.00	43.64
797	N	LYS	A	224	-7.673	40.083	90.988	1.00	42.20
798	CA	LYS	A	224	-6.690	41.126	91.203	1.00	42.99
799	CB	LYS	A	224	-5.815	41.282	89.985	1.00	43.53
800	CG	LYS	A	224	-4.818	42.422	90.066	1.00	48.88
801	CD	LYS	A	224	-4.028	42.585	88.762	1.00	53.83
802	CE	LYS	A	224	-4.857	43.218	87.650	1.00	57.23
803	NZ	LYS	A	224	-4.028	43.546	86.442	1.00	60.62
804	C	LYS	A	224	-7.356	42.461	91.560	1.00	43.04
805	O	LYS	A	224	-7.042	43.032	92.599	1.00	42.77
806	N	LEU	A	225	-8.297	42.913	90.732	1.00	40.83
807	CA	LEU	A	225	-9.019	44.181	90.897	1.00	41.08

FIGURE 3P

A	B	C	D	E	F	G	H	I	J
808	CB	LEU	A	225	-9.501	44.691	89.533	1.00	39.93
809	CG	LEU	A	225	-8.469	45.241	88.540	1.00	43.97
810	CD1	LEU	A	225	-9.133	45.930	87.345	1.00	46.75
811	CD2	LEU	A	225	-7.332	46.154	89.189	1.00	43.17
812	C	LEU	A	225	-10.254	44.157	91.818	1.00	40.68
813	O	LEU	A	225	-10.784	45.218	92.182	1.00	40.10
814	N	SER	A	226	-10.732	42.961	92.147	1.00	40.56
815	CA	SER	A	226	-11.977	42.780	92.913	1.00	41.73
816	CB	SER	A	226	-11.943	43.579	94.225	1.00	43.22
817	OG	SER	A	226	-12.999	43.112	95.048	1.00	50.73
818	C	SER	A	226	-13.295	43.050	92.126	1.00	40.15
819	O	SER	A	226	-14.238	42.256	92.215	1.00	40.02
820	N	LYS	A	227	-13.373	44.163	91.397	1.00	38.66
821	CA	LYS	A	227	-14.500	44.424	90.506	1.00	38.28
822	CB	LYS	A	227	-15.744	44.876	91.241	1.00	39.83
823	CG	LYS	A	227	-15.527	46.112	92.107	1.00	43.19
824	CD	LYS	A	227	-16.763	46.395	92.964	1.00	47.23
825	CE	LYS	A	227	-17.009	47.898	93.037	1.00	50.59
826	NZ	LYS	A	227	-15.847	48.527	93.755	1.00	50.07
827	C	LYS	A	227	-14.057	45.437	89.453	1.00	37.32
828	O	LYS	A	227	-13.032	46.114	89.637	1.00	35.43
829	N	PHE	A	228	-14.784	45.541	88.339	1.00	34.98
830	CA	PHE	A	228	-14.287	46.384	87.241	1.00	34.36
831	CB	PHE	A	228	-14.483	45.686	85.908	1.00	32.60
832	CG	PHE	A	228	-13.706	44.403	85.761	1.00	32.22
833	CD1	PHE	A	228	-12.556	44.214	86.480	1.00	30.96
834	CE1	PHE	A	228	-11.797	43.063	86.350	1.00	34.49
835	CZ	PHE	A	228	-12.178	42.076	85.495	1.00	33.23
836	CE2	PHE	A	228	-13.374	42.246	84.752	1.00	34.03
837	CD2	PHE	A	228	-14.105	43.409	84.862	1.00	33.41
838	C	PHE	A	228	-15.057	47.675	87.146	1.00	35.43
839	O	PHE	A	228	-16.228	47.733	87.549	1.00	34.99
840	N	ASP	A	229	-14.441	48.714	86.591	1.00	36.24
841	CA	ASP	A	229	-15.233	49.943	86.453	1.00	38.49
842	CB	ASP	A	229	-14.302	51.205	86.331	1.00	39.70
843	CG	ASP	A	229	-13.484	51.241	85.072	1.00	44.65
844	OD1	ASP	A	229	-13.729	50.465	84.121	1.00	47.75
845	OD2	ASP	A	229	-12.527	52.046	84.948	1.00	52.81
846	C	ASP	A	229	-16.211	49.721	85.300	1.00	37.35
847	O	ASP	A	229	-16.187	48.669	84.633	1.00	35.10
848	N	GLU	A	230	-17.038	50.715	85.027	1.00	37.87
849	CA	GLU	A	230	-18.077	50.513	84.040	1.00	37.66
850	CB	GLU	A	230	-19.054	51.668	84.115	1.00	39.25
851	CG	GLU	A	230	-19.840	51.650	85.412	1.00	42.58
852	CD	GLU	A	230	-21.045	52.566	85.320	1.00	49.54
853	OE1	GLU	A	230	-22.168	52.129	85.629	1.00	52.06
854	OE2	GLU	A	230	-20.868	53.740	84.896	1.00	52.95
855	C	GLU	A	230	-17.483	50.440	82.659	1.00	36.98
856	O	GLU	A	230	-18.015	49.782	81.767	1.00	34.19
857	N	GLN	A	231	-16.382	51.159	82.461	1.00	36.82
858	CA	GLN	A	231	-15.764	51.174	81.152	1.00	36.74

FIGURE 3Q

A	B	C	D	E	F	G	H	I	J
859	CB	GLN	A	231	-14.587	52.171	81.128	1.00	37.55
860	CG	GLN	A	231	-14.995	53.671	81.393	1.00	43.18
861	CD	GLN	A	231	-16.011	53.956	82.522	1.00	46.32
862	OB1	GLN	A	231	-15.731	53.743	83.729	1.00	42.61
863	NH2	GLN	A	231	-17.181	54.488	82.121	1.00	47.58
864	C	GLN	A	231	-15.212	49.784	80.817	1.00	35.85
865	O	GLN	A	231	-15.382	49.294	79.724	1.00	36.28
866	N	ARG	A	232	-14.495	49.186	81.746	1.00	33.62
867	CA	ARG	A	232	-13.858	47.928	81.426	1.00	33.95
868	CB	ARG	A	232	-12.832	47.530	82.509	1.00	33.54
869	CG	ARG	A	232	-12.260	46.109	82.347	1.00	36.13
870	CD	ARG	A	232	-11.433	45.610	83.520	1.00	40.91
871	NE	ARG	A	232	-10.425	46.602	83.868	1.00	49.70
872	CZ	ARG	A	232	-9.221	46.706	83.323	1.00	52.36
873	NH1	ARG	A	232	-8.817	45.862	82.371	1.00	53.98
874	NH2	ARG	A	232	-8.409	47.659	83.757	1.00	55.77
875	C	ARG	A	232	-14.931	46.853	81.238	1.00	31.99
876	O	ARG	A	232	-14.813	46.023	80.341	1.00	31.18
877	N	THR	A	233	-15.971	46.890	82.072	1.00	30.75
878	CA	THR	A	233	-17.071	45.931	82.002	1.00	30.48
879	CB	THR	A	233	-18.080	46.242	83.085	1.00	31.41
880	OG1	THR	A	233	-17.464	45.953	84.337	1.00	28.31
881	CG2	THR	A	233	-19.358	45.267	82.986	1.00	28.26
882	C	THR	A	233	-17.783	46.052	80.670	1.00	30.81
883	O	THR	A	233	-17.937	45.050	79.937	1.00	29.48
884	N	ALA	A	234	-18.283	47.261	80.402	1.00	30.12
885	CA	ALA	A	234	-18.959	47.533	79.118	1.00	30.91
886	CB	ALA	A	234	-19.319	48.998	78.963	1.00	29.68
887	C	ALA	A	234	-18.104	47.102	77.946	1.00	30.58
888	O	ALA	A	234	-18.611	46.555	76.947	1.00	31.37
889	N	THR	A	235	-16.815	47.389	78.028	1.00	30.80
890	CA	THR	A	235	-15.928	46.948	76.953	1.00	32.35
891	CB	THR	A	235	-14.533	47.546	77.129	1.00	32.78
892	OG1	THR	A	235	-14.654	48.951	77.006	1.00	34.77
893	CG2	THR	A	235	-13.580	47.153	75.967	1.00	34.42
894	C	THR	A	235	-15.860	45.400	76.799	1.00	32.27
895	O	THR	A	235	-16.000	44.850	75.656	1.00	31.74
896	N	TYR	A	236	-15.711	44.693	77.914	1.00	30.81
897	CA	TYR	A	236	-15.676	43.199	77.861	1.00	29.77
898	CB	TYR	A	236	-15.384	42.639	79.250	1.00	29.80
899	CG	TYR	A	236	-13.950	42.738	79.720	1.00	32.58
900	CD1	TYR	A	236	-12.913	42.926	78.818	1.00	33.58
901	CE1	TYR	A	236	-11.617	42.996	79.243	1.00	36.97
902	CZ	TYR	A	236	-11.324	42.872	80.601	1.00	36.77
903	OH	TYR	A	236	-10.025	42.971	81.016	1.00	37.51
904	CE2	TYR	A	236	-12.330	42.686	81.516	1.00	35.78
905	CD2	TYR	A	236	-13.643	42.634	81.065	1.00	36.22
906	C	TYR	A	236	-17.042	42.628	77.377	1.00	29.01
907	O	TYR	A	236	-17.103	41.680	76.632	1.00	29.48
908	N	ILE	A	237	-18.139	43.236	77.814	1.00	30.01
909	CA	ILE	A	237	-19.472	42.788	77.378	1.00	30.81

FIGURE 3R

A	B	C	D	E	F	G	H	I	J
910	CB	ILE	A	237	-20.591	43.548	78.061	1.00	29.26
911	CG1	ILE	A	237	-20.580	43.141	79.541	1.00	31.33
912	CD1	ILE	A	237	-20.607	41.494	79.786	1.00	32.72
913	CG2	ILE	A	237	-21.938	43.089	77.553	1.00	30.76
914	C	ILE	A	237	-19.524	42.975	75.874	1.00	30.97
915	O	ILE	A	237	-20.024	42.110	75.165	1.00	28.59
916	N	THR	A	238	-19.071	44.126	75.413	1.00	29.66
917	CA	THR	A	238	-19.074	44.331	73.936	1.00	31.58
918	CB	THR	A	238	-18.483	45.699	73.600	1.00	30.71
919	OG1	THR	A	238	-19.345	46.681	74.169	1.00	33.26
920	CG2	THR	A	238	-18.547	45.948	72.092	1.00	36.01
921	C	THR	A	238	-18.279	43.281	73.177	1.00	31.08
922	O	THR	A	238	-18.744	42.785	72.179	1.00	31.90
923	N	GLU	A	239	-17.037	43.029	73.578	1.00	30.93
924	CA	GLU	A	239	-16.252	41.972	72.973	1.00	33.24
925	CB	GLU	A	239	-14.875	41.829	73.619	1.00	34.28
926	CG	GLU	A	239	-14.045	43.126	73.458	1.00	41.57
927	CD	GLU	A	239	-12.704	43.109	74.200	1.00	50.78
928	OE1	GLU	A	239	-11.654	43.089	73.518	1.00	59.72
929	OE2	GLU	A	239	-12.655	43.120	75.451	1.00	51.19
930	C	GLU	A	239	-16.947	40.625	72.977	1.00	32.47
931	O	GLU	A	239	-16.890	39.912	72.000	1.00	31.96
932	N	LEU	A	240	-17.585	40.307	74.093	1.00	31.66
933	CA	LEU	A	240	-18.252	39.033	74.293	1.00	32.00
934	CB	LEU	A	240	-18.793	38.941	75.749	1.00	32.28
935	CG	LEU	A	240	-17.918	38.368	76.879	1.00	38.51
936	CD1	LEU	A	240	-17.987	39.156	78.226	1.00	40.94
937	CD2	LEU	A	240	-18.427	36.978	77.180	1.00	46.36
938	C	LEU	A	240	-19.433	38.992	73.363	1.00	31.20
939	O	LEU	A	240	-19.674	37.997	72.730	1.00	30.06
940	N	ALA	A	241	-20.189	40.074	73.311	1.00	30.48
941	CA	ALA	A	241	-21.385	40.079	72.470	1.00	30.85
942	CB	ALA	A	241	-22.161	41.336	72.673	1.00	28.64
943	C	ALA	A	241	-21.046	39.875	70.996	1.00	32.63
944	O	ALA	A	241	-21.803	39.233	70.268	1.00	34.13
945	N	ASN	A	242	-19.946	40.476	70.547	1.00	32.98
946	CA	ASN	A	242	-19.501	40.301	69.176	1.00	34.79
947	CB	ASN	A	242	-18.342	41.225	68.806	1.00	35.05
948	CG	ASN	A	242	-18.735	42.668	68.801	1.00	37.46
949	OD1	ASN	A	242	-19.820	43.009	68.356	1.00	41.91
950	ND2	ASN	A	242	-17.838	43.531	69.270	1.00	36.72
951	C	ASN	A	242	-19.045	38.878	68.944	1.00	33.66
952	O	ASN	A	242	-19.384	38.322	67.926	1.00	34.14
953	N	ALA	A	243	-18.284	38.287	69.871	1.00	33.13
954	CA	ALA	A	243	-17.846	36.899	69.686	1.00	33.50
955	CB	ALA	A	243	-16.883	36.413	70.821	1.00	32.46
956	C	ALA	A	243	-19.100	36.026	69.596	1.00	33.00
957	O	ALA	A	243	-19.170	35.121	68.775	1.00	34.04
958	N	LEU	A	244	-20.063	36.281	70.460	1.00	32.30
959	CA	LEU	A	244	-21.290	35.495	70.486	1.00	34.17
960	CB	LEU	A	244	-22.109	35.794	71.761	1.00	32.72

FIGURE 3S

A	B	C	D	E	F	G	H	I	J
961	CG	LEU	A	244	-21.487	35.248	73.091	1.00	33.90
962	CD1	LEU	A	244	-22.375	35.636	74.211	1.00	34.58
963	CD2	LEU	A	244	-21.346	33.731	73.053	1.00	36.04
964	C	LEU	A	244	-22.155	35.710	69.239	1.00	35.07
965	O	LEU	A	244	-22.795	34.770	68.771	1.00	35.54
966	N	SER	A	245	-22.205	36.935	68.736	1.00	36.14
967	CA	SER	A	245	-22.968	37.144	67.497	1.00	37.32
968	CB	SER	A	245	-22.881	38.566	66.993	1.00	36.71
969	OG	SER	A	245	-23.518	39.430	67.885	1.00	40.23
970	C	SER	A	245	-22.396	36.244	66.430	1.00	37.77
971	O	SER	A	245	-23.168	35.561	65.712	1.00	39.78
972	N	TYR	A	246	-21.062	36.236	66.324	1.00	36.62
973	CA	TYR	A	246	-20.388	35.397	65.334	1.00	36.75
974	CB	TYR	A	246	-18.867	35.666	65.303	1.00	35.63
975	CG	TYR	A	246	-18.040	34.768	64.415	1.00	36.74
976	CD1	TYR	A	246	-17.752	35.114	63.086	1.00	41.06
977	CE1	TYR	A	246	-16.991	34.283	62.293	1.00	40.63
978	CZ	TYR	A	246	-16.491	33.118	62.824	1.00	42.34
979	OH	TYR	A	246	-15.711	32.256	62.077	1.00	41.50
980	CE2	TYR	A	246	-16.782	32.766	64.151	1.00	40.05
981	CD2	TYR	A	246	-17.538	33.590	64.897	1.00	34.12
982	C	TYR	A	246	-20.730	33.925	65.554	1.00	36.80
983	O	TYR	A	246	-21.143	33.248	64.624	1.00	36.65
984	N	CYS	A	247	-20.608	33.425	66.778	1.00	36.48
985	CA	CYS	A	247	-21.015	32.049	67.085	1.00	36.90
986	CB	CYS	A	247	-20.803	31.722	68.595	1.00	37.60
987	SG	CYS	A	247	-19.067	31.666	69.093	1.00	42.84
988	C	CYS	A	247	-22.473	31.711	66.758	1.00	37.39
989	O	CYS	A	247	-22.746	30.672	66.121	1.00	37.58
990	N	HIS	A	248	-23.400	32.529	67.256	1.00	36.67
991	CA	HIS	A	248	-24.817	32.267	67.094	1.00	37.58
992	CB	HIS	A	248	-25.698	33.244	67.876	1.00	37.99
993	CG	HIS	A	248	-25.520	33.191	69.372	1.00	34.73
994	NE1	HIS	A	248	-26.053	34.149	70.204	1.00	36.33
995	CE1	HIS	A	248	-25.718	33.886	71.452	1.00	37.79
996	NE2	HIS	A	248	-24.957	32.807	71.458	1.00	33.84
997	CD2	HIS	A	248	-24.812	32.354	70.168	1.00	33.28
998	C	HIS	A	248	-25.189	32.338	65.601	1.00	39.08
999	O	HIS	A	248	-26.098	31.629	65.132	1.00	39.68
1000	N	SER	A	249	-24.443	33.132	64.854	1.00	39.67
1001	CA	SER	A	249	-24.748	33.244	63.437	1.00	41.50
1002	CE	SER	A	249	-23.805	34.207	62.715	1.00	40.00
1003	OG	SER	A	249	-22.561	33.599	62.481	1.00	41.00
1004	C	SER	A	249	-24.644	31.857	62.870	1.00	42.73
1005	O	SER	A	249	-25.312	31.550	61.894	1.00	43.62
1006	N	LYS	A	250	-23.799	31.026	63.476	1.00	43.39
1007	CA	LYS	A	250	-23.626	29.655	63.026	1.00	44.23
1008	CB	LYS	A	250	-22.163	29.299	63.057	1.00	45.26
1009	CG	LYS	A	250	-21.329	30.154	62.111	1.00	46.88
1010	CD	LYS	A	250	-19.847	29.989	62.369	1.00	46.41
1011	CE	LYS	A	250	-19.102	31.086	61.674	1.00	50.41

FIGURE 3T

A	B	C	D	E	F	G	H	I	J
1012	NZ	LYS	A	250	-18.101	30.510	60.721	1.00	55.71
1013	C	LYS	A	250	-24.430	28.706	63.912	1.00	44.23
1014	O	LYS	A	250	-24.318	27.494	63.813	1.00	44.92
1015	N	ARG	A	251	-25.252	29.280	64.771	1.00	43.03
1016	CA	ARG	A	251	-26.013	28.499	65.722	1.00	43.09
1017	CB	ARG	A	251	-27.003	27.566	65.025	1.00	44.17
1018	CG	ARG	A	251	-28.079	28.334	64.298	1.00	48.00
1019	CD	ARG	A	251	-29.293	28.613	65.135	1.00	52.94
1020	NE	ARG	A	251	-30.316	27.613	64.935	1.00	57.46
1021	CZ	ARG	A	251	-31.409	27.504	65.694	1.00	59.77
1022	NH1	ARG	A	251	-32.301	26.573	65.421	1.00	58.50
1023	NH2	ARG	A	251	-31.617	28.329	66.721	1.00	60.29
1024	C	ARG	A	251	-25.133	27.719	66.694	1.00	40.87
1025	O	ARG	A	251	-25.579	26.725	67.287	1.00	41.62
1026	N	VAL	A	252	-23.890	28.136	66.866	1.00	38.05
1027	CA	VAL	A	252	-23.090	27.469	67.883	1.00	35.63
1028	CB	VAL	A	252	-21.605	27.579	67.574	1.00	36.71
1029	CG1	VAL	A	252	-20.757	27.253	68.833	1.00	36.16
1030	CG2	VAL	A	252	-21.267	26.671	66.408	1.00	32.96
1031	C	VAL	A	252	-23.398	28.171	69.217	1.00	35.05
1032	O	VAL	A	252	-23.342	29.421	69.278	1.00	34.28
1033	N	ILE	A	253	-23.751	27.394	70.238	1.00	34.78
1034	CA	ILE	A	253	-24.036	27.990	71.537	1.00	34.21
1035	CB	ILE	A	253	-25.528	27.772	72.035	1.00	36.92
1036	CG1	ILE	A	253	-26.008	26.317	72.080	1.00	34.92
1037	CD1	ILE	A	253	-27.473	26.046	72.506	1.00	33.07
1038	CG2	ILE	A	253	-26.490	28.538	71.085	1.00	39.25
1039	C	ILE	A	253	-22.899	27.570	72.441	1.00	32.53
1040	O	ILE	A	253	-22.459	26.397	72.378	1.00	32.33
1041	N	HIS	A	254	-22.352	28.508	73.234	1.00	30.81
1042	CA	HIS	A	254	-21.118	28.158	73.987	1.00	29.80
1043	CB	HIS	A	254	-20.268	29.410	74.275	1.00	29.82
1044	CG	HIS	A	254	-19.012	29.095	75.010	1.00	27.09
1045	ND1	HIS	A	254	-19.012	28.695	76.327	1.00	28.08
1046	CE1	HIS	A	254	-17.763	28.515	76.729	1.00	29.12
1047	NE2	HIS	A	254	-16.960	28.776	75.712	1.00	31.85
1048	CD2	HIS	A	254	-17.712	29.137	74.622	1.00	26.39
1049	C	HIS	A	254	-21.449	27.412	75.287	1.00	29.59
1050	O	HIS	A	254	-20.897	26.345	75.563	1.00	28.85
1051	N	ARG	A	255	-22.405	27.957	76.024	1.00	30.83
1052	CA	ARG	A	255	-22.920	27.309	77.234	1.00	30.64
1053	CB	ARG	A	255	-23.388	25.859	76.916	1.00	30.22
1054	CG	ARG	A	255	-24.321	25.716	75.687	1.00	32.25
1055	CD	ARG	A	255	-25.189	24.432	75.685	1.00	31.75
1056	NE	ARG	A	255	-24.362	23.256	75.649	1.00	30.77
1057	CZ	ARG	A	255	-24.820	22.017	75.669	1.00	31.35
1058	NH1	ARG	A	255	-26.095	21.798	75.751	1.00	31.83
1059	NH2	ARG	A	255	-23.977	21.003	75.617	1.00	33.16
1060	C	ARG	A	255	-21.983	27.279	78.449	1.00	31.38
1061	O	ARG	A	255	-22.363	26.734	79.477	1.00	32.65
1062	N	ASP	A	256	-20.758	27.768	78.356	1.00	31.39

FIGURE 3U

A	B	C	D	E	F	G	H	I	J
1063	CA	ASP	A	256	-19.870	27.725	79.524	1.00	31.75
1064	CB	ASP	A	256	-18.964	26.468	79.453	1.00	33.11
1065	CG	ASP	A	256	-18.280	26.139	80.746	1.00	35.07
1066	OD1	ASP	A	256	-18.773	26.510	81.850	1.00	40.12
1067	OD2	ASP	A	256	-17.221	25.488	80.765	1.00	36.02
1068	C	ASP	A	256	-19.086	29.003	79.566	1.00	31.14
1069	O	ASP	A	256	-17.867	29.025	79.770	1.00	30.07
1070	N	ILE	A	257	-19.785	30.091	79.314	1.00	29.90
1071	CA	ILE	A	257	-19.166	31.390	79.385	1.00	32.07
1072	CB	ILE	A	257	-20.057	32.311	78.676	1.00	32.32
1073	CG1	ILE	A	257	-19.935	31.982	77.143	1.00	33.96
1074	CD1	ILE	A	257	-21.111	32.476	76.377	1.00	40.55
1075	CG2	ILE	A	257	-19.737	33.701	78.956	1.00	34.18
1076	C	ILE	A	257	-19.064	31.704	80.897	1.00	33.31
1077	O	ILE	A	257	-20.100	31.754	81.616	1.00	34.68
1078	N	LYS	A	258	-17.824	31.761	81.371	1.00	31.48
1079	CA	LYS	A	258	-17.519	32.187	82.750	1.00	30.84
1080	CB	LYS	A	258	-17.738	31.082	83.740	1.00	30.14
1081	CG	LYS	A	258	-16.926	29.870	83.529	1.00	34.40
1082	CD	LYS	A	258	-17.629	28.644	84.283	1.00	38.03
1083	CE	LYS	A	258	-16.742	27.431	84.270	1.00	41.53
1084	NZ	LYS	A	258	-17.580	26.165	84.236	1.00	42.89
1085	C	LYS	A	258	-16.097	32.737	82.755	1.00	30.04
1086	O	LYS	A	258	-15.324	32.537	81.785	1.00	26.95
1087	N	PRO	A	259	-15.775	33.505	83.792	1.00	28.33
1088	CA	PRO	A	259	-14.498	34.201	83.824	1.00	28.63
1089	CB	PRO	A	259	-14.480	34.892	85.200	1.00	27.18
1090	CG	PRO	A	259	-15.974	35.164	85.421	1.00	28.54
1091	CD	PRO	A	259	-16.648	33.843	84.942	1.00	29.43
1092	C	PRO	A	259	-13.330	33.301	83.615	1.00	27.22
1093	O	PRO	A	259	-12.411	33.740	82.963	1.00	28.73
1094	N	GLU	A	260	-13.331	32.086	84.121	1.00	27.82
1095	CA	GLU	A	260	-12.176	31.226	83.876	1.00	28.92
1096	CB	GLU	A	260	-12.107	30.028	84.836	1.00	31.10
1097	CG	GLU	A	260	-13.445	29.310	84.935	1.00	35.20
1098	CD	GLU	A	260	-14.340	29.861	86.098	1.00	44.01
1099	OE1	GLU	A	260	-14.462	29.148	87.133	1.00	49.68
1100	OE2	GLU	A	260	-14.908	30.985	86.003	1.00	33.54
1101	C	GLU	A	260	-12.027	30.755	82.420	1.00	28.10
1102	O	GLU	A	260	-10.957	30.265	82.068	1.00	29.64
1103	N	ASN	A	261	-13.012	30.991	81.567	1.00	26.88
1104	CA	ASN	A	261	-12.871	30.603	80.189	1.00	26.98
1105	CB	ASN	A	261	-14.077	29.731	79.753	1.00	26.91
1106	CG	ASN	A	261	-14.099	28.389	80.436	1.00	26.82
1107	OD1	ASN	A	261	-13.048	27.832	80.771	1.00	28.36
1108	ND2	ASN	A	261	-15.322	27.808	80.578	1.00	25.54
1109	C	ASN	A	261	-12.786	31.829	79.266	1.00	28.17
1110	O	ASN	A	261	-12.988	31.685	78.040	1.00	28.42
1111	N	LEU	A	262	-12.540	33.021	79.848	1.00	27.97
1112	CA	LEU	A	262	-12.454	34.254	79.091	1.00	28.33
1113	CB	LEU	A	262	-13.351	35.341	79.662	1.00	29.50

FIGURE 3V

A	B	C	D	E	F	G	H	I	J
1114	CG	LEU	A	262	-14.856	35.024	79.655	1.00	28.47
1115	CD1	LEU	A	262	-15.646	36.167	80.215	1.00	30.27
1116	CD2	LEU	A	262	-15.308	34.782	78.142	1.00	27.13
1117	C	LEU	A	262	-11.011	34.681	79.268	1.00	29.16
1118	O	LEU	A	262	-10.554	34.891	80.405	1.00	28.97
1119	N	LEU	A	263	-10.299	34.765	78.163	1.00	26.56
1120	CA	LEU	A	263	-8.869	34.988	78.194	1.00	28.18
1121	CB	LEU	A	263	-8.103	33.942	77.360	1.00	26.68
1122	CG	LEU	A	263	-8.452	32.452	77.583	1.00	29.56
1123	CD1	LEU	A	263	-7.487	31.481	76.825	1.00	30.33
1124	CD2	LEU	A	263	-8.272	32.171	79.060	1.00	34.69
1125	C	LEU	A	263	-8.574	36.382	77.619	1.00	29.97
1126	O	LEU	A	263	-9.416	37.002	76.966	1.00	29.84
1127	N	LEU	A	264	-7.378	36.850	77.904	1.00	30.85
1128	CA	LEU	A	264	-6.951	38.182	77.486	1.00	30.74
1129	CB	LEU	A	264	-6.721	39.079	78.732	1.00	30.19
1130	CG	LEU	A	264	-7.965	39.287	79.626	1.00	30.14
1131	CD1	LEU	A	264	-7.590	39.909	81.031	1.00	32.30
1132	CD2	LEU	A	264	-9.105	40.109	78.954	1.00	31.52
1133	C	LEU	A	264	-5.737	38.121	76.554	1.00	30.62
1134	O	LEU	A	264	-4.722	37.498	76.853	1.00	29.43
1135	N	GLY	A	265	-5.901	38.736	75.390	1.00	31.75
1136	CA	GLY	A	265	-4.858	38.816	74.396	1.00	33.01
1137	C	GLY	A	265	-3.830	39.883	74.737	1.00	34.94
1138	O	GLY	A	265	-3.969	40.574	75.751	1.00	34.96
1139	N	SER	A	266	-2.807	40.035	73.891	1.00	36.48
1140	CA	SER	A	266	-1.722	40.978	74.178	1.00	39.30
1141	CB	SER	A	266	-0.547	40.820	73.179	1.00	39.61
1142	OG	SER	A	266	-1.009	40.865	71.841	1.00	45.24
1143	C	SER	A	266	-2.195	42.443	74.287	1.00	39.68
1144	O	SER	A	266	-1.591	43.221	74.989	1.00	41.74
1145	N	ALA	A	267	-3.286	42.827	73.641	1.00	39.84
1146	CA	ALA	A	267	-3.757	44.193	73.821	1.00	40.82
1147	CB	ALA	A	267	-4.312	44.745	72.510	1.00	41.57
1148	C	ALA	A	267	-4.826	44.245	74.881	1.00	40.28
1149	O	ALA	A	267	-5.507	45.246	75.017	1.00	41.69
1150	N	GLY	A	268	-4.999	43.160	75.616	1.00	38.92
1151	CA	GLY	A	268	-6.066	43.099	76.605	1.00	39.91
1152	C	GLY	A	268	-7.440	42.772	76.035	1.00	39.16
1153	O	GLY	A	268	-8.421	42.894	76.749	1.00	39.70
1154	N	GLU	A	269	-7.525	42.328	74.781	1.00	37.55
1155	CA	GLU	A	269	-8.846	42.066	74.210	1.00	37.18
1156	CB	GLU	A	269	-8.844	42.024	72.686	1.00	36.91
1157	CG	GLU	A	269	-7.914	40.966	72.111	1.00	42.45
1158	CD	GLU	A	269	-6.497	41.495	71.931	1.00	48.18
1159	OE1	GLU	A	269	-5.789	41.696	72.951	1.00	49.56
1160	OE2	GLU	A	269	-6.122	41.758	70.767	1.00	54.50
1161	C	GLU	A	269	-9.323	40.711	74.736	1.00	34.23
1162	O	GLU	A	269	-8.556	39.821	74.981	1.00	32.16
1163	N	LEU	A	270	-10.611	40.599	74.889	1.00	33.25
1164	CA	LEU	A	270	-11.188	39.438	75.496	1.00	33.59

FIGURE 3W

A	B	C	D	E	F	G	H	I	J
1165	CB	LEU	A	270	-12.532	39.836	76.065	1.00	33.76
1166	CG	LEU	A	270	-13.339	38.735	76.759	1.00	35.55
1167	CD1	LEU	A	270	-14.388	39.362	77.722	1.00	38.75
1168	CD2	LEU	A	270	-14.078	37.912	75.720	1.00	35.40
1169	C	LEU	A	270	-11.330	38.372	74.432	1.00	33.86
1170	O	LEU	A	270	-11.671	38.675	73.243	1.00	34.74
1171	N	LYS	A	271	-11.099	37.133	74.834	1.00	31.42
1172	CA	LYS	A	271	-11.191	35.979	73.930	1.00	31.29
1173	CB	LYS	A	271	-9.795	35.492	73.555	1.00	31.80
1174	CG	LYS	A	271	-9.128	36.524	72.537	1.00	35.49
1175	CD	LYS	A	271	-7.766	36.110	72.033	1.00	38.66
1176	CE	LYS	A	271	-7.165	37.192	71.120	1.00	39.08
1177	NZ	LYS	A	271	-7.494	36.998	69.682	1.00	42.36
1178	C	LYS	A	271	-11.994	34.844	74.605	1.00	29.90
1179	O	LYS	A	271	-11.668	34.417	75.687	1.00	30.82
1180	N	ILE	A	272	-13.062	34.408	73.997	1.00	29.63
1181	CA	ILE	A	272	-13.770	33.287	74.572	1.00	31.28
1182	CB	ILE	A	272	-15.251	33.238	74.154	1.00	32.97
1183	CG1	ILE	A	272	-15.867	31.943	74.660	1.00	34.14
1184	CD1	ILE	A	272	-17.133	32.166	75.428	1.00	41.15
1185	CG2	ILE	A	272	-15.415	33.105	72.693	1.00	36.72
1186	C	ILE	A	272	-12.981	32.023	74.227	1.00	29.77
1187	O	ILE	A	272	-12.487	31.888	73.131	1.00	29.32
1188	N	ALA	A	273	-12.833	31.121	75.199	1.00	29.03
1189	CA	ALA	A	273	-12.072	29.905	75.040	1.00	28.02
1190	CB	ALA	A	273	-10.720	30.027	75.796	1.00	25.93
1191	C	ALA	A	273	-12.890	28.757	75.639	1.00	28.47
1192	O	ALA	A	273	-14.008	28.975	76.165	1.00	29.27
1193	N	ASP	A	274	-12.329	27.558	75.567	1.00	28.32
1194	CA	ASP	A	274	-12.900	26.361	76.217	1.00	30.13
1195	CB	ASP	A	274	-12.994	26.548	77.752	1.00	28.19
1196	CG	ASP	A	274	-13.273	25.239	78.444	1.00	30.91
1197	OD1	ASP	A	274	-13.354	25.219	79.681	1.00	27.79
1198	OD2	ASP	A	274	-13.407	24.145	77.794	1.00	33.55
1199	C	ASP	A	274	-14.278	25.977	75.649	1.00	29.52
1200	O	ASP	A	274	-15.326	26.170	76.275	1.00	28.76
1201	N	PHE	A	275	-14.288	25.489	74.427	1.00	29.79
1202	CA	PHE	A	275	-15.564	25.206	73.796	1.00	31.48
1203	CB	PHE	A	275	-15.508	25.464	72.250	1.00	30.13
1204	CG	PHE	A	275	-15.621	26.887	71.890	1.00	30.02
1205	CD1	PHE	A	275	-14.605	27.761	72.243	1.00	30.82
1206	CE1	PHE	A	275	-14.705	29.121	71.908	1.00	31.65
1207	CZ	PHE	A	275	-15.847	29.599	71.217	1.00	30.66
1208	CE2	PHE	A	275	-16.846	28.718	70.853	1.00	28.29
1209	CD2	PHE	A	275	-16.707	27.356	71.175	1.00	28.74
1210	C	PHE	A	275	-16.042	23.793	74.019	1.00	31.32
1211	O	PHE	A	275	-16.874	23.333	73.263	1.00	33.58
1212	N	GLY	A	276	-15.542	23.128	75.050	1.00	32.57
1213	CA	GLY	A	276	-15.980	21.764	75.409	1.00	33.27
1214	C	GLY	A	276	-17.470	21.591	75.718	1.00	33.63
1215	O	GLY	A	276	-18.005	20.503	75.585	1.00	35.45

FIGURE 3X

A	B	C	D	E	F	G	H	I	J
1216	N	TRP	A	277	-18.168	22.649	76.085	1.00	32.48
1217	CA	TRP	A	277	-19.590	22.515	76.352	1.00	32.61
1218	CB	TRP	A	277	-19.996	23.356	77.571	1.00	31.90
1219	CG	TRP	A	277	-19.872	22.560	78.827	1.00	33.69
1220	CD1	TRP	A	277	-18.906	22.655	79.755	1.00	35.79
1221	NE1	TRP	A	277	-19.139	21.779	80.781	1.00	39.83
1222	CE2	TRP	A	277	-20.287	21.083	80.520	1.00	39.15
1223	CD2	TRP	A	277	-20.784	21.563	79.295	1.00	36.18
1224	CE3	TRP	A	277	-21.976	21.021	78.795	1.00	37.42
1225	CZ3	TRP	A	277	-22.625	19.991	79.531	1.00	40.23
1226	CH2	TRP	A	277	-22.103	19.550	80.772	1.00	36.38
1227	CZ2	TRP	A	277	-20.945	20.080	81.281	1.00	39.03
1228	C	TRP	A	277	-20.375	22.965	75.141	1.00	31.77
1229	O	TRP	A	277	-21.575	22.921	75.138	1.00	31.92
1230	N	SER	A	278	-19.701	23.425	74.102	1.00	30.59
1231	CA	SER	A	278	-20.489	23.978	73.041	1.00	32.01
1232	CB	SER	A	278	-19.643	24.889	72.181	1.00	32.28
1233	OG	SER	A	278	-18.600	24.165	71.545	1.00	37.30
1234	C	SER	A	278	-21.253	22.892	72.194	1.00	33.25
1235	O	SER	A	278	-20.861	21.734	72.149	1.00	34.86
1236	N	VAL	A	279	-22.353	23.307	71.560	1.00	34.55
1237	CA	VAL	A	279	-23.201	22.424	70.775	1.00	36.63
1238	CB	VAL	A	279	-24.238	21.763	71.710	1.00	36.03
1239	CG1	VAL	A	279	-25.173	22.788	72.273	1.00	35.73
1240	CG2	VAL	A	279	-24.920	20.585	71.018	1.00	38.77
1241	C	VAL	A	279	-23.873	23.260	69.702	1.00	36.61
1242	O	VAL	A	279	-23.927	24.488	69.850	1.00	35.60
1243	N	HIS	A	280	-24.438	22.679	68.636	1.00	37.41
1244	CA	HIS	A	280	-25.231	23.526	67.764	1.00	37.57
1245	CB	HIS	A	280	-25.245	22.996	66.333	1.00	39.08
1246	CG	HIS	A	280	-23.897	23.025	65.714	1.00	39.44
1247	ND1	HIS	A	280	-23.001	21.988	65.841	1.00	45.81
1248	CE1	HIS	A	280	-21.883	22.296	65.203	1.00	45.95
1249	NE2	HIS	A	280	-22.028	23.493	64.660	1.00	46.60
1250	CD2	HIS	A	280	-23.283	23.969	64.964	1.00	45.31
1251	C	HIS	A	280	-26.590	23.569	68.343	1.00	37.33
1252	O	HIS	A	280	-27.040	22.566	68.911	1.00	37.60
1253	N	ALA	A	281	-27.212	24.737	68.237	1.00	36.55
1254	CA	ALA	A	281	-28.494	25.000	68.825	1.00	38.46
1255	CB	ALA	A	281	-28.828	26.461	68.875	1.00	37.40
1256	C	ALA	A	281	-29.597	24.175	68.213	1.00	41.55
1257	O	ALA	A	281	-29.485	23.958	67.009	1.00	41.26
1258	N	PRO	A	282	-30.764	24.290	68.822	1.00	41.87
1259	CA	PRO	A	282	-31.606	23.344	69.535	1.00	41.68
1260	CB	PRO	A	282	-32.618	22.859	68.482	1.00	42.55
1261	CG	PRO	A	282	-32.233	23.675	67.281	1.00	41.31
1262	CD	PRO	A	282	-31.631	25.026	67.910	1.00	44.02
1263	C	PRO	A	282	-30.712	22.264	70.155	1.00	40.86
1264	O	PRO	A	282	-30.004	21.537	69.457	1.00	40.78
1265	N	SER	A	283	-30.704	22.233	71.483	1.00	38.89
1266	CA	SER	A	283	-30.011	21.158	72.148	1.00	39.04

FIGURE 3Y

A	B	C	D	E	F	G	H	I	J
1267	CB	SER	A	283	-28.515	21.411	72.222	1.00	38.52
1268	OG	SER	A	283	-27.832	20.358	72.915	1.00	40.61
1269	C	SER	A	283	-30.549	20.857	73.526	1.00	39.37
1270	O	SER	A	283	-31.163	21.706	74.190	1.00	39.84
1271	N	SER	A	284	-30.310	19.641	73.955	1.00	39.43
1272	CA	SER	A	284	-30.584	19.299	75.314	1.00	41.76
1273	CB	SER	A	284	-31.245	17.940	75.356	1.00	43.22
1274	OG	SER	A	284	-32.242	17.954	76.372	1.00	47.58
1275	C	SER	A	284	-29.239	19.218	75.979	1.00	42.43
1276	O	SER	A	284	-28.205	19.677	75.432	1.00	43.18
1277	N	ARG	A	285	-29.226	18.626	77.161	1.00	42.91
1278	CA	ARG	A	285	-27.980	18.390	77.875	1.00	43.85
1279	CB	ARG	A	285	-27.914	19.247	79.145	1.00	43.75
1280	CG	ARG	A	285	-26.582	19.105	79.889	1.00	43.99
1281	CD	ARG	A	285	-26.415	20.119	81.009	1.00	45.74
1282	NE	ARG	A	285	-27.612	20.161	81.838	1.00	49.71
1283	CZ	ARG	A	285	-27.710	19.525	82.988	1.00	52.93
1284	NH1	ARG	A	285	-28.822	19.597	83.713	1.00	53.76
1285	NH2	ARG	A	285	-26.675	18.805	83.415	1.00	55.88
1286	C	ARG	A	285	-27.906	16.906	78.267	1.00	43.69
1287	O	ARG	A	285	-28.836	16.435	78.958	1.00	44.26
1288	N	THR	A	288	-25.116	15.611	79.501	1.00	47.82
1289	CA	THR	A	288	-23.866	15.594	80.345	1.00	48.76
1290	CB	THR	A	288	-22.675	16.360	79.646	1.00	48.89
1291	OG1	THR	A	288	-22.479	15.933	78.293	1.00	51.35
1292	CG2	THR	A	288	-21.345	16.015	80.297	1.00	47.79
1293	C	THR	A	288	-24.101	16.243	81.732	1.00	49.14
1294	O	THR	A	288	-24.852	17.214	81.851	1.00	47.49
1295	N	LEU	A	289	-23.443	15.702	82.757	1.00	50.43
1296	CA	LEU	A	289	-23.441	16.283	84.118	1.00	53.20
1297	CB	LEU	A	289	-22.802	15.267	85.056	1.00	53.63
1298	CG	LEU	A	289	-23.766	14.793	86.121	1.00	57.03
1299	CD1	LEU	A	289	-24.112	15.959	87.046	1.00	59.33
1300	CD2	LEU	A	289	-25.011	14.189	85.463	1.00	60.93
1301	C	LEU	A	289	-22.694	17.651	84.276	1.00	53.31
1302	O	LEU	A	289	-21.619	17.817	83.725	1.00	53.60
1303	N	CYS	A	290	-23.229	18.557	85.113	1.00	55.50
1304	CA	CYS	A	290	-22.752	19.970	85.335	1.00	57.08
1305	CB	CYS	A	290	-23.926	20.833	85.843	1.00	57.49
1306	SG	CYS	A	290	-25.205	21.169	84.585	1.00	64.10
1307	C	CYS	A	290	-21.426	20.313	86.110	1.00	56.52
1308	O	CYS	A	290	-20.448	19.597	85.933	1.00	57.86
1309	N	GLY	A	291	-21.379	21.417	86.898	1.00	55.52
1310	CA	GLY	A	291	-20.169	21.921	87.613	1.00	52.28
1311	C	GLY	A	291	-20.635	23.035	88.583	1.00	50.12
1312	O	GLY	A	291	-21.578	22.837	89.335	1.00	49.36
1313	N	THR	A	292	-20.005	24.208	88.624	1.00	47.90
1314	CA	THR	A	292	-20.610	25.273	89.444	1.00	44.87
1315	CB	THR	A	292	-19.672	26.461	89.703	1.00	47.07
1316	OG1	THR	A	292	-20.442	27.619	90.103	1.00	47.16
1317	CG2	THR	A	292	-19.180	26.950	88.383	1.00	48.62

FIGURE 3Z

A	B	C	D	E	F	G	H	I	J
1318	C	THR	A	292	-21.798	25.781	88.602	1.00	41.88
1319	O	THR	A	292	-21.634	25.980	87.395	1.00	41.81
1320	N	LEU	A	293	-22.964	26.018	89.200	1.00	36.57
1321	CA	LEU	A	293	-24.101	26.475	88.391	1.00	35.69
1322	CB	LEU	A	293	-25.398	26.116	89.074	1.00	35.41
1323	CG	LEU	A	293	-26.168	24.807	88.850	1.00	42.89
1324	CD1	LEU	A	293	-25.377	23.623	88.364	1.00	43.78
1325	CD2	LEU	A	293	-27.014	24.434	90.111	1.00	43.98
1326	C	LEU	A	293	-24.158	27.975	88.146	1.00	33.14
1327	O	LEU	A	293	-25.017	28.435	87.395	1.00	32.15
1328	N	ASP	A	294	-23.246	28.729	88.755	1.00	31.34
1329	CA	ASP	A	294	-23.362	30.191	88.780	1.00	30.17
1330	CB	ASP	A	294	-22.072	30.788	89.362	1.00	31.41
1331	CG	ASP	A	294	-22.096	30.775	90.875	1.00	36.52
1332	OD1	ASP	A	294	-21.149	30.228	91.449	1.00	42.47
1333	OD2	ASP	A	294	-23.074	31.224	91.535	1.00	39.71
1334	C	ASP	A	294	-23.740	30.941	87.510	1.00	29.90
1335	O	ASP	A	294	-24.404	31.966	87.568	1.00	28.82
1336	N	TYR	A	295	-23.192	30.486	86.390	1.00	28.35
1337	CA	TYR	A	295	-23.409	31.144	85.110	1.00	29.18
1338	CB	TYR	A	295	-22.081	31.134	84.392	1.00	29.58
1339	CG	TYR	A	295	-21.064	31.857	85.196	1.00	28.98
1340	CD1	TYR	A	295	-20.229	31.183	86.080	1.00	33.43
1341	CE1	TYR	A	295	-19.281	31.854	86.858	1.00	35.92
1342	CZ	TYR	A	295	-19.257	33.216	86.782	1.00	33.99
1343	OH	TYR	A	295	-18.331	33.880	87.548	1.00	39.27
1344	CE2	TYR	A	295	-20.078	33.903	85.910	1.00	33.69
1345	CD2	TYR	A	295	-20.983	33.215	85.124	1.00	32.42
1346	C	TYR	A	295	-24.468	30.562	84.180	1.00	30.12
1347	O	TYR	A	295	-24.606	31.005	83.032	1.00	29.57
1348	N	LEU	A	296	-25.192	29.556	84.637	1.00	29.88
1349	CA	LEU	A	296	-26.160	28.872	83.753	1.00	30.57
1350	CB	LEU	A	296	-26.090	27.394	83.996	1.00	31.08
1351	CG	LEU	A	296	-24.686	26.827	83.787	1.00	36.71
1352	CD1	LEU	A	296	-24.675	25.310	84.148	1.00	38.55
1353	CD2	LEU	A	296	-24.209	27.111	82.373	1.00	35.88
1354	C	LEU	A	296	-27.547	29.301	84.042	1.00	30.06
1355	O	LEU	A	296	-27.902	29.441	85.223	1.00	28.76
1356	N	PRO	A	297	-28.346	29.432	82.969	1.00	29.59
1357	CA	PRO	A	297	-29.752	29.814	83.035	1.00	29.63
1358	CB	PRO	A	297	-30.105	30.142	81.563	1.00	30.10
1359	CG	PRO	A	297	-29.256	29.232	80.816	1.00	30.36
1360	CD	PRO	A	297	-27.902	29.176	81.578	1.00	30.37
1361	C	PRO	A	297	-30.593	28.606	83.518	1.00	30.53
1362	O	PRO	A	297	-30.133	27.475	83.493	1.00	29.72
1363	N	PRO	A	298	-31.785	28.907	83.980	1.00	32.38
1364	CA	PRO	A	298	-32.748	27.911	84.486	1.00	35.25
1365	CB	PRO	A	298	-34.030	28.716	84.623	1.00	34.69
1366	CG	PRO	A	298	-33.555	30.121	84.897	1.00	35.48
1367	CD	PRO	A	298	-32.269	30.280	84.096	1.00	32.59
1368	C	PRO	A	298	-32.951	26.766	83.492	1.00	37.27

FIGURE 3AA

A	B	C	D	E	F	G	H	I	J
1369	O	PRO	A	298	-32.829	25.611	83.920	1.00	38.20
1370	N	GLU	A	299	-33.089	27.056	82.197	1.00	38.20
1371	CA	GLU	A	299	-33.396	25.984	81.252	1.00	40.09
1372	CB	GLU	A	299	-33.745	26.499	79.833	1.00	39.94
1373	CG	GLU	A	299	-32.614	27.242	79.139	1.00	39.16
1374	CD	GLU	A	299	-32.578	28.754	79.410	1.00	39.82
1375	OE1	GLU	A	299	-33.124	29.242	80.436	1.00	37.57
1376	OE2	GLU	A	299	-31.980	29.467	78.564	1.00	37.07
1377	C	GLU	A	299	-32.299	24.969	81.174	1.00	41.23
1378	O	GLU	A	299	-32.543	23.747	81.097	1.00	41.06
1379	N	MET	A	300	-31.075	25.468	81.248	1.00	41.85
1380	CA	MET	A	300	-29.951	24.596	81.206	1.00	43.22
1381	CB	MET	A	300	-28.679	25.376	81.027	1.00	43.88
1382	CG	MET	A	300	-27.499	24.515	81.020	1.00	49.44
1383	SD	MET	A	300	-26.839	24.501	79.396	1.00	60.26
1384	CE	MET	A	300	-25.544	23.343	79.572	1.00	54.71
1385	C	MET	A	300	-29.837	23.750	82.461	1.00	44.15
1386	O	MET	A	300	-29.682	22.512	82.356	1.00	44.33
1387	N	ILE	A	301	-29.864	24.362	83.638	1.00	44.85
1388	CA	ILE	A	301	-29.735	23.521	84.831	1.00	46.79
1389	CB	ILE	A	301	-29.657	24.332	86.111	1.00	47.71
1390	CG1	ILE	A	301	-30.818	25.308	86.276	1.00	50.37
1391	CD1	ILE	A	301	-30.163	26.709	86.641	1.00	56.06
1392	CG2	ILE	A	301	-28.369	25.222	86.119	1.00	46.42
1393	C	ILE	A	301	-30.836	22.441	84.891	1.00	48.14
1394	O	ILE	A	301	-30.538	21.258	85.093	1.00	48.00
1395	N	GLU	A	302	-32.085	22.854	84.677	1.00	49.20
1396	CA	GLU	A	302	-33.236	21.952	84.671	1.00	51.02
1397	CB	GLU	A	302	-34.520	22.754	84.559	1.00	51.41
1398	CG	GLU	A	302	-34.831	23.576	85.792	1.00	55.27
1399	CD	GLU	A	302	-35.798	24.695	85.474	1.00	59.81
1400	OE1	GLU	A	302	-36.087	25.555	86.349	1.00	63.64
1401	OE2	GLU	A	302	-36.294	24.693	84.335	1.00	60.77
1402	C	GLU	A	302	-33.242	20.937	83.540	1.00	51.10
1403	O	GLU	A	302	-34.179	20.143	83.434	1.00	51.91
1404	N	GLY	A	303	-32.240	20.988	82.669	1.00	50.72
1405	CA	GLY	A	303	-32.155	20.071	81.553	1.00	49.63
1406	C	GLY	A	303	-33.262	20.211	80.509	1.00	49.30
1407	O	GLY	A	303	-33.624	19.227	79.864	1.00	50.60
1408	N	ARG	A	304	-33.809	21.402	80.323	1.00	47.24
1409	CA	ARG	A	304	-34.799	21.609	79.256	1.00	46.04
1410	CB	ARG	A	304	-35.716	22.800	79.591	1.00	46.73
1411	CG	ARG	A	304	-36.712	22.504	80.773	1.00	49.63
1412	CD	ARG	A	304	-37.419	23.759	81.406	1.00	55.75
1413	NE	ARG	A	304	-37.497	24.898	80.477	1.00	58.41
1414	CZ	ARG	A	304	-37.277	26.172	80.822	1.00	60.70
1415	NH1	ARG	A	304	-37.360	27.151	79.903	1.00	61.20
1416	NH2	ARG	A	304	-36.965	26.473	82.083	1.00	58.65
1417	C	ARG	A	304	-34.097	21.838	77.907	1.00	44.67
1418	O	ARG	A	304	-32.861	21.996	77.852	1.00	43.50
1419	N	MET	A	305	-34.858	21.822	76.819	1.00	41.82

FIGURE 3AB

A	B	C	D	E	F	G	H	I	J
1420	CA	MET	A	305	-34.254	22.089	75.503	1.00	42.19
1421	CB	MET	A	305	-35.229	21.851	74.333	1.00	41.21
1422	CG	MET	A	305	-35.426	20.357	73.940	1.00	49.17
1423	SD	MET	A	305	-33.904	19.263	73.897	1.00	58.33
1424	CE	MET	A	305	-33.530	19.109	72.178	1.00	55.74
1425	C	MET	A	305	-33.865	23.563	75.506	1.00	38.86
1426	O	MET	A	305	-34.562	24.353	76.091	1.00	38.98
1427	N	HIS	A	306	-32.786	23.933	74.838	1.00	37.11
1428	CA	HIS	A	306	-32.358	25.332	74.903	1.00	36.23
1429	CB	HIS	A	306	-31.486	25.515	76.164	1.00	34.70
1430	CG	HIS	A	306	-30.350	24.541	76.239	1.00	31.57
1431	ND1	HIS	A	306	-30.436	23.353	76.920	1.00	30.19
1432	CE1	HIS	A	306	-29.306	22.688	76.809	1.00	31.98
1433	NE2	HIS	A	306	-28.485	23.405	76.061	1.00	33.02
1434	CD2	HIS	A	306	-29.117	24.569	75.698	1.00	31.19
1435	C	HIS	A	306	-31.570	25.711	73.662	1.00	36.80
1436	O	HIS	A	306	-31.106	24.834	72.897	1.00	36.60
1437	N	ASP	A	307	-31.378	27.017	73.498	1.00	37.06
1438	CA	ASP	A	307	-30.728	27.538	72.310	1.00	37.90
1439	CB	ASP	A	307	-31.778	27.990	71.294	1.00	38.38
1440	CG	ASP	A	307	-32.671	29.159	71.810	1.00	43.93
1441	OD1	ASP	A	307	-33.590	29.626	71.077	1.00	51.28
1442	OD2	ASP	A	307	-32.554	29.695	72.926	1.00	43.92
1443	C	ASP	A	307	-29.824	28.702	72.622	1.00	37.59
1444	O	ASP	A	307	-29.361	28.848	73.739	1.00	37.38
1445	N	GLU	A	308	-29.676	29.585	71.642	1.00	36.80
1446	CA	GLU	A	308	-28.726	30.683	71.742	1.00	37.37
1447	CB	GLU	A	308	-28.825	31.551	70.492	1.00	37.85
1448	CG	GLU	A	308	-28.228	30.905	69.266	1.00	40.29
1449	CD	GLU	A	308	-29.197	29.990	68.528	1.00	45.91
1450	OE1	GLU	A	308	-30.253	29.629	69.089	1.00	43.52
1451	OE2	GLU	A	308	-28.879	29.616	67.361	1.00	48.59
1452	C	GLU	A	308	-29.008	31.574	72.946	1.00	35.64
1453	O	GLU	A	308	-28.099	32.237	73.434	1.00	34.56
1454	N	LYS	A	309	-30.247	31.603	73.410	1.00	33.77
1455	CA	LYS	A	309	-30.557	32.491	74.535	1.00	33.68
1456	CB	LYS	A	309	-32.071	32.589	74.813	1.00	34.13
1457	CG	LYS	A	309	-32.853	33.190	73.626	1.00	35.58
1458	CD	LYS	A	309	-32.289	34.571	73.302	1.00	39.16
1459	CE	LYS	A	309	-33.289	35.387	72.485	1.00	46.27
1460	NZ	LYS	A	309	-34.624	35.259	73.121	1.00	46.60
1461	C	LYS	A	309	-29.793	32.123	75.816	1.00	32.90
1462	O	LYS	A	309	-29.673	32.945	76.708	1.00	32.40
1463	N	VAL	A	310	-29.242	30.932	75.870	1.00	31.17
1464	CA	VAL	A	310	-28.473	30.508	77.022	1.00	32.76
1465	CB	VAL	A	310	-27.993	29.086	76.822	1.00	33.19
1466	CG1	VAL	A	310	-26.762	28.825	77.639	1.00	36.49
1467	CG2	VAL	A	310	-29.154	28.095	77.249	1.00	32.68
1468	C	VAL	A	310	-27.292	31.457	77.250	1.00	33.09
1469	O	VAL	A	310	-27.083	31.951	78.365	1.00	31.77
1470	N	ASP	A	311	-26.568	31.770	76.175	1.00	31.32

FIGURE 3AC

A	B	C	D	E	F	G	H	I	J
1471	CA	ASP	A	311	-25.422	32.682	76.275	1.00	32.19
1472	CB	ASP	A	311	-24.578	32.656	74.950	1.00	32.21
1473	CG	ASP	A	311	-23.893	31.256	74.696	1.00	33.63
1474	OD1	ASP	A	311	-23.601	30.482	75.635	1.00	34.07
1475	OD2	ASP	A	311	-23.615	30.806	73.584	1.00	34.64
1476	C	ASP	A	311	-25.848	34.089	76.674	1.00	31.34
1477	O	ASP	A	311	-25.054	34.819	77.265	1.00	31.50
1478	N	LEU	A	312	-27.074	34.500	76.349	1.00	30.65
1479	CA	LEU	A	312	-27.540	35.829	76.741	1.00	30.65
1480	CB	LEU	A	312	-28.880	36.194	76.114	1.00	32.89
1481	CG	LEU	A	312	-28.740	36.747	74.676	1.00	33.15
1482	CD1	LEU	A	312	-27.998	38.080	74.782	1.00	37.24
1483	CD2	LEU	A	312	-27.978	35.740	73.770	1.00	37.98
1484	C	LEU	A	312	-27.659	35.915	78.252	1.00	30.10
1485	O	LEU	A	312	-27.212	36.882	78.870	1.00	29.74
1486	N	TRP	A	313	-28.221	34.878	78.847	1.00	28.70
1487	CA	TRP	A	313	-28.290	34.885	80.311	1.00	29.18
1488	CB	TRP	A	313	-28.980	33.655	80.774	1.00	29.28
1489	CG	TRP	A	313	-28.856	33.398	82.197	1.00	29.13
1490	CD1	TRP	A	313	-27.798	32.871	82.848	1.00	26.72
1491	NE1	TRP	A	313	-28.104	32.728	84.184	1.00	28.25
1492	CE2	TRP	A	313	-29.402	33.129	84.370	1.00	28.86
1493	CD2	TRP	A	313	-29.877	33.584	83.145	1.00	26.93
1494	CE3	TRP	A	313	-31.192	34.028	83.062	1.00	26.93
1495	CZ3	TRP	A	313	-31.969	34.038	84.199	1.00	31.77
1496	CH2	TRP	A	313	-31.450	33.635	85.422	1.00	28.09
1497	CZ2	TRP	A	313	-30.175	33.170	85.538	1.00	26.06
1498	C	TRP	A	313	-26.880	34.959	80.918	1.00	29.84
1499	O	TRP	A	313	-26.633	35.738	81.823	1.00	27.08
1500	N	SER	A	314	-25.958	34.152	80.409	1.00	29.72
1501	CA	SER	A	314	-24.593	34.162	80.901	1.00	30.37
1502	CB	SER	A	314	-23.777	33.087	80.139	1.00	30.46
1503	OG	SER	A	314	-24.244	31.776	80.494	1.00	35.30
1504	C	SER	A	314	-23.937	35.568	80.801	1.00	31.13
1505	O	SER	A	314	-23.199	35.980	81.679	1.00	27.77
1506	N	LEU	A	315	-24.183	36.276	79.708	1.00	30.52
1507	CA	LEU	A	315	-23.699	37.630	79.537	1.00	31.47
1508	CB	LEU	A	315	-24.303	38.182	78.258	1.00	31.92
1509	CG	LEU	A	315	-23.556	39.322	77.630	1.00	34.89
1510	CD1	LEU	A	315	-22.077	38.966	77.617	1.00	32.65
1511	CD2	LEU	A	315	-24.094	39.490	76.207	1.00	34.24
1512	C	LEU	A	315	-24.189	38.521	80.657	1.00	30.26
1513	O	LEU	A	315	-23.467	39.375	81.154	1.00	29.93
1514	N	GLY	A	316	-25.416	38.270	81.084	1.00	31.24
1515	CA	GLY	A	316	-26.030	39.018	82.160	1.00	28.40
1516	C	GLY	A	316	-25.336	38.709	83.470	1.00	29.31
1517	O	GLY	A	316	-24.989	39.635	84.232	1.00	28.62
1518	N	VAL	A	317	-25.123	37.426	83.751	1.00	29.39
1519	CA	VAL	A	317	-24.392	37.045	84.964	1.00	29.86
1520	CB	VAL	A	317	-24.272	35.498	85.118	1.00	29.69
1521	CG1	VAL	A	317	-23.433	35.135	86.302	1.00	31.40

FIGURE 3AD

A	B	C	D	E	F	G	H	I	J
1522	CG2	VAL	A	317	-25.625	34.885	85.201	1.00	30.52
1523	C	VAL	A	317	-22.971	37.715	84.961	1.00	30.09
1524	O	VAL	A	317	-22.525	38.275	85.976	1.00	28.93
1525	N	LEU	A	318	-22.283	37.665	83.832	1.00	29.07
1526	CA	LEU	A	318	-20.973	38.219	83.759	1.00	29.74
1527	CB	LEU	A	318	-20.327	37.940	82.391	1.00	29.62
1528	CG	LEU	A	318	-19.795	36.566	82.116	1.00	33.45
1529	CD1	LEU	A	318	-19.343	36.587	80.606	1.00	31.59
1530	CD2	LEU	A	318	-18.570	36.186	83.001	1.00	26.99
1531	C	LEU	A	318	-21.015	39.716	83.938	1.00	29.78
1532	O	LEU	A	318	-20.140	40.243	84.572	1.00	29.27
1533	N	CYS	A	319	-22.036	40.401	83.423	1.00	29.91
1534	CA	CYS	A	319	-22.072	41.831	83.606	1.00	31.51
1535	CB	CYS	A	319	-23.214	42.431	82.818	1.00	31.68
1536	SG	CYS	A	319	-23.007	44.241	82.719	1.00	40.49
1537	C	CYS	A	319	-22.152	42.216	85.116	1.00	31.22
1538	O	CYS	A	319	-21.439	43.092	85.632	1.00	29.46
1539	N	TYR	A	320	-22.985	41.482	85.819	1.00	29.74
1540	CA	TYR	A	320	-23.149	41.689	87.243	1.00	28.88
1541	CB	TYR	A	320	-24.320	40.843	87.746	1.00	28.54
1542	CG	TYR	A	320	-24.606	40.973	89.212	1.00	28.67
1543	CD1	TYR	A	320	-23.746	40.436	90.152	1.00	28.63
1544	CE1	TYR	A	320	-24.037	40.574	91.521	1.00	31.25
1545	CZ	TYR	A	320	-25.218	41.261	91.901	1.00	27.73
1546	OH	TYR	A	320	-25.601	41.384	93.204	1.00	34.97
1547	CE2	TYR	A	320	-26.070	41.711	91.016	1.00	28.41
1548	CD2	TYR	A	320	-25.745	41.625	89.636	1.00	27.53
1549	C	TYR	A	320	-21.810	41.373	87.977	1.00	29.65
1550	O	TYR	A	320	-21.286	42.208	88.741	1.00	28.99
1551	N	GLU	A	321	-21.252	40.185	87.727	1.00	28.26
1552	CA	GLU	A	321	-19.996	39.790	88.381	1.00	29.29
1553	CB	GLU	A	321	-19.511	38.398	87.976	1.00	27.46
1554	CG	GLU	A	321	-18.367	37.989	88.874	1.00	31.39
1555	CD	GLU	A	321	-17.939	36.565	88.757	1.00	39.04
1556	OE1	GLU	A	321	-16.893	36.204	89.386	1.00	40.16
1557	OE2	GLU	A	321	-18.629	35.792	88.062	1.00	41.43
1558	C	GLU	A	321	-18.858	40.810	88.173	1.00	29.09
1559	O	GLU	A	321	-18.148	41.162	89.112	1.00	28.70
1560	N	PHE	A	322	-18.712	41.290	86.942	1.00	28.18
1561	CA	PHE	A	322	-17.690	42.282	86.620	1.00	29.59
1562	CB	PHE	A	322	-17.742	42.671	85.130	1.00	30.02
1563	CG	PHE	A	322	-17.277	41.578	84.189	1.00	29.13
1564	CD1	PHE	A	322	-16.706	40.416	84.659	1.00	29.70
1565	CE1	PHE	A	322	-16.287	39.422	83.772	1.00	32.17
1566	CZ	PHE	A	322	-16.416	39.619	82.418	1.00	33.54
1567	CE2	PHE	A	322	-16.981	40.753	81.954	1.00	33.04
1568	CD2	PHE	A	322	-17.412	41.738	82.844	1.00	30.45
1569	C	PHE	A	322	-17.874	43.526	87.468	1.00	30.51
1570	O	PHE	A	322	-16.924	44.017	88.092	1.00	32.18
1571	N	LEU	A	323	-19.079	44.047	87.443	1.00	30.76
1572	CA	LEU	A	323	-19.461	45.235	88.188	1.00	31.93

FIGURE 3AE

A	B	C	D	E	F	G	H	I	J
1573	CB	LEU	A	323	-20.850	45.703	87.765	1.00	31.23
1574	CG	LEU	A	323	-21.005	46.300	86.372	1.00	29.55
1575	CD1	LEU	A	323	-22.381	46.696	86.162	1.00	28.14
1576	CD2	LEU	A	323	-20.049	47.538	86.199	1.00	33.58
1577	C	LEU	A	323	-19.455	45.015	89.689	1.00	33.43
1578	O	LEU	A	323	-19.064	45.912	90.469	1.00	33.54
1579	N	VAL	A	324	-19.868	43.827	90.139	1.00	33.63
1580	CA	VAL	A	324	-20.061	43.630	91.587	1.00	33.28
1581	CB	VAL	A	324	-21.449	42.976	91.860	1.00	33.80
1582	CG1	VAL	A	324	-21.709	42.622	93.380	1.00	32.67
1583	CG2	VAL	A	324	-22.586	43.857	91.300	1.00	34.21
1584	C	VAL	A	324	-18.928	42.911	92.263	1.00	35.51
1585	O	VAL	A	324	-18.642	43.145	93.424	1.00	35.39
1586	N	GLY	A	325	-18.226	42.038	91.560	1.00	35.56
1587	CA	GLY	A	325	-17.194	41.273	92.225	1.00	35.35
1588	C	GLY	A	325	-17.594	39.835	92.535	1.00	36.00
1589	O	GLY	A	325	-16.746	39.003	92.813	1.00	37.09
1590	N	LYS	A	326	-18.880	39.528	92.442	1.00	35.21
1591	CA	LYS	A	326	-19.304	38.161	92.638	1.00	35.82
1592	CB	LYS	A	326	-19.650	37.922	94.122	1.00	35.98
1593	CG	LYS	A	326	-20.941	38.598	94.489	1.00	40.08
1594	CD	LYS	A	326	-21.233	38.587	96.024	1.00	47.40
1595	CE	LYS	A	326	-22.214	39.748	96.321	1.00	51.86
1596	NZ	LYS	A	326	-21.819	40.553	97.484	1.00	48.80
1597	C	LYS	A	326	-20.512	37.929	91.754	1.00	33.85
1598	O	LYS	A	326	-21.227	38.853	91.451	1.00	31.55
1599	N	PRO	A	327	-20.755	36.691	91.332	1.00	33.50
1600	CA	PRO	A	327	-21.927	36.437	90.463	1.00	32.79
1601	CB	PRO	A	327	-21.678	34.994	89.969	1.00	33.94
1602	CG	PRO	A	327	-21.026	34.347	91.241	1.00	35.31
1603	CD	PRO	A	327	-19.983	35.449	91.621	1.00	33.33
1604	C	PRO	A	327	-23.245	36.595	91.255	1.00	30.81
1605	O	PRO	A	327	-23.300	36.380	92.463	1.00	32.11
1606	N	PRO	A	328	-24.309	36.989	90.598	1.00	29.67
1607	CA	PRO	A	328	-25.541	37.336	91.315	1.00	29.91
1608	CB	PRO	A	328	-26.396	37.936	90.249	1.00	28.24
1609	CG	PRO	A	328	-25.879	37.253	88.972	1.00	30.64
1610	CD	PRO	A	328	-24.406	37.239	89.158	1.00	29.03
1611	C	PRO	A	328	-26.291	36.189	92.066	1.00	32.07
1612	O	PRO	A	328	-27.110	36.498	92.935	1.00	31.51
1613	N	PHE	A	329	-26.007	34.919	91.745	1.00	30.77
1614	CA	PHE	A	329	-26.723	33.835	92.391	1.00	32.15
1615	CB	PHE	A	329	-27.367	32.923	91.329	1.00	30.34
1616	CG	PHE	A	329	-28.198	33.663	90.371	1.00	29.16
1617	CD1	PHE	A	329	-29.349	34.294	90.783	1.00	26.86
1618	CE1	PHE	A	329	-30.109	35.003	89.921	1.00	26.79
1619	CZ	PHE	A	329	-29.692	35.115	88.583	1.00	29.19
1620	CE2	PHE	A	329	-28.507	34.503	88.156	1.00	28.24
1621	CD2	PHE	A	329	-27.779	33.782	89.042	1.00	29.12
1622	C	PHE	A	329	-25.833	33.027	93.287	1.00	33.34
1623	O	PHE	A	329	-26.260	31.988	93.763	1.00	35.58

FIGURE 3AF

A	B	C	D	E	F	G	H	I	J
1624	N	GLU	A	330	-24.623	33.505	93.513	1.00	35.42
1625	CA	GLU	A	330	-23.656	32.877	94.397	1.00	38.76
1626	CB	GLU	A	330	-22.588	33.906	94.768	1.00	39.72
1627	CG	GLU	A	330	-21.251	33.325	95.177	1.00	44.21
1628	CD	GLU	A	330	-20.378	34.364	95.894	1.00	53.19
1629	OE1	GLU	A	330	-20.779	34.883	96.993	1.00	53.55
1630	OE2	GLU	A	330	-19.295	34.665	95.337	1.00	58.16
1631	C	GLU	A	330	-24.373	32.498	95.704	1.00	39.04
1632	O	GLU	A	330	-25.175	33.269	96.217	1.00	37.84
1633	N	ALA	A	331	-24.084	31.303	96.200	1.00	40.28
1634	CA	ALA	A	331	-24.680	30.771	97.425	1.00	40.27
1635	CB	ALA	A	331	-26.002	30.149	97.126	1.00	41.00
1636	C	ALA	A	331	-23.658	29.753	97.888	1.00	41.45
1637	O	ALA	A	331	-22.757	29.404	97.127	1.00	41.16
1638	N	ASN	A	332	-23.776	29.280	99.121	1.00	41.89
1639	CA	ASN	A	332	-22.737	28.404	99.662	1.00	40.88
1640	CB	ASN	A	332	-22.602	28.566	101.220	1.00	43.11
1641	CG	ASN	A	332	-21.784	29.826	101.626	1.00	48.66
1642	OD1	ASN	A	332	-20.570	29.937	101.359	1.00	55.22
1643	ND2	ASN	A	332	-22.462	30.786	102.245	1.00	55.15
1644	C	ASN	A	332	-23.050	26.959	99.235	1.00	37.57
1645	O	ASN	A	332	-22.225	26.050	99.332	1.00	39.59
1646	N	THR	A	333	-24.231	26.755	98.724	1.00	36.44
1647	CA	THR	A	333	-24.536	25.410	98.298	1.00	36.73
1648	CB	THR	A	333	-25.645	24.665	99.264	1.00	37.09
1649	OG1	THR	A	333	-25.097	24.779	100.596	1.00	40.58
1650	CG2	THR	A	333	-25.650	23.188	99.046	1.00	42.78
1651	C	THR	A	333	-24.981	25.425	96.865	1.00	34.33
1652	O	THR	A	333	-25.642	26.372	96.398	1.00	33.08
1653	N	TYR	A	334	-24.713	24.319	96.190	1.00	34.09
1654	CA	TYR	A	334	-25.181	24.137	94.830	1.00	33.28
1655	CB	TYR	A	334	-24.748	22.746	94.425	1.00	34.15
1656	CG	TYR	A	334	-25.241	22.198	93.148	1.00	35.67
1657	CD1	TYR	A	334	-24.367	22.102	92.069	1.00	39.34
1658	CE1	TYR	A	334	-24.765	21.536	90.885	1.00	41.47
1659	CZ	TYR	A	334	-26.025	21.028	90.764	1.00	45.44
1660	OH	TYR	A	334	-26.316	20.439	89.536	1.00	53.44
1661	CE2	TYR	A	334	-26.931	21.076	91.822	1.00	41.49
1662	CD2	TYR	A	334	-26.535	21.644	93.021	1.00	39.26
1663	C	TYR	A	334	-26.682	24.162	94.837	1.00	34.00
1664	O	TYR	A	334	-27.330	24.686	93.921	1.00	32.29
1665	N	GLN	A	335	-27.263	23.490	95.830	1.00	33.92
1666	CA	GLN	A	335	-28.698	23.382	95.856	1.00	34.59
1667	CB	GLN	A	335	-29.136	22.355	96.934	1.00	36.44
1668	CG	GLN	A	335	-28.819	20.855	96.503	1.00	37.94
1669	CD	GLN	A	335	-27.495	20.276	97.085	1.00	40.55
1670	OE1	GLN	A	335	-27.461	19.102	97.552	1.00	37.86
1671	NE2	GLN	A	335	-26.437	21.088	97.108	1.00	36.60
1672	C	GLN	A	335	-29.324	24.794	96.037	1.00	34.20
1673	O	GLN	A	335	-30.282	25.140	95.379	1.00	35.30
1674	N	GLU	A	336	-28.791	25.559	96.942	1.00	32.77

FIGURE 3AG

A	B	C	D	E	F	G	H	I	J
1675	CA	GLU	A	336	-29.205	26.915	97.201	1.00	34.44
1676	CB	GLU	A	336	-28.385	27.265	98.440	1.00	36.83
1677	CG	GLU	A	336	-28.352	28.650	99.013	1.00	40.38
1678	CD	GLU	A	336	-27.092	28.866	99.875	1.00	50.58
1679	OE1	GLU	A	336	-25.978	28.319	99.620	1.00	58.53
1680	OE2	GLU	A	336	-27.126	29.678	100.790	1.00	40.31
1681	C	GLU	A	336	-28.995	27.811	95.873	1.00	33.80
1682	O	GLU	A	336	-29.877	28.563	95.449	1.00	31.17
1683	N	THR	A	337	-27.868	27.635	95.191	1.00	32.08
1684	CA	THR	A	337	-27.662	28.368	93.945	1.00	31.48
1685	CB	THR	A	337	-26.235	28.047	93.405	1.00	30.08
1686	OG1	THR	A	337	-25.313	28.487	94.390	1.00	33.00
1687	CG2	THR	A	337	-25.906	28.929	92.159	1.00	28.28
1688	C	THR	A	337	-28.724	28.055	92.919	1.00	29.52
1689	O	THR	A	337	-29.235	28.932	92.247	1.00	28.46
1690	N	TYR	A	338	-29.027	26.756	92.754	1.00	30.17
1691	CA	TYR	A	338	-30.049	26.309	91.844	1.00	31.26
1692	CB	TYR	A	338	-30.212	24.805	92.063	1.00	33.22
1693	CG	TYR	A	338	-31.212	24.185	91.144	1.00	39.22
1694	CD1	TYR	A	338	-30.800	23.567	89.964	1.00	43.19
1695	CE1	TYR	A	338	-31.709	22.969	89.124	1.00	48.41
1696	CZ	TYR	A	338	-33.058	23.003	89.460	1.00	51.06
1697	OH	TYR	A	338	-33.992	22.431	88.628	1.00	55.33
1698	CE2	TYR	A	338	-33.479	23.615	90.622	1.00	46.29
1699	CD2	TYR	A	338	-32.560	24.179	91.462	1.00	40.97
1700	C	TYR	A	338	-31.396	27.002	92.147	1.00	30.29
1701	O	TYR	A	338	-32.102	27.472	91.277	1.00	29.01
1702	N	ALA	A	339	-31.739	27.026	93.411	1.00	29.94
1703	CA	ALA	A	339	-32.984	27.737	93.804	1.00	30.96
1704	CB	ALA	A	339	-33.149	27.684	95.338	1.00	30.49
1705	C	ALA	A	339	-32.960	29.196	93.377	1.00	29.24
1706	O	ALA	A	339	-33.915	29.676	92.798	1.00	30.50
1707	N	ARG	A	340	-31.867	29.875	93.686	1.00	28.80
1708	CA	ARG	A	340	-31.708	31.285	93.348	1.00	29.69
1709	CB	ARG	A	340	-30.375	31.804	93.896	1.00	29.56
1710	CG	ARG	A	340	-30.447	31.776	95.494	1.00	34.62
1711	CD	ARG	A	340	-31.154	32.954	96.011	1.00	39.53
1712	NE	ARG	A	340	-30.493	34.042	95.311	1.00	45.06
1713	CZ	ARG	A	340	-29.323	34.499	95.716	1.00	45.59
1714	NH1	ARG	A	340	-28.683	35.456	95.038	1.00	44.01
1715	NH2	ARG	A	340	-28.835	33.995	96.846	1.00	44.77
1716	C	ARG	A	340	-31.871	31.547	91.858	1.00	29.56
1717	O	ARG	A	340	-32.649	32.431	91.413	1.00	29.84
1718	N	ILE	A	341	-31.248	30.679	91.087	1.00	29.70
1719	CA	ILE	A	341	-31.279	30.831	89.641	1.00	27.75
1720	CB	ILE	A	341	-30.265	29.851	89.077	1.00	27.48
1721	CG1	ILE	A	341	-28.835	30.335	89.281	1.00	24.64
1722	CD1	ILE	A	341	-27.801	29.268	88.849	1.00	27.34
1723	CG2	ILE	A	341	-30.531	29.617	87.612	1.00	28.09
1724	C	ILE	A	341	-32.653	30.582	89.129	1.00	28.03
1725	O	ILE	A	341	-33.236	31.391	88.388	1.00	29.33

FIGURE 3AH

A	B	C	D	E	F	G	H	I	J
1726	N	SER	A	342	-33.258	29.478	89.585	1.00	30.95
1727	CA	SER	A	342	-34.581	29.093	89.125	1.00	31.90
1728	CB	SER	A	342	-34.973	27.779	89.822	1.00	33.11
1729	OG	SER	A	342	-36.337	27.538	89.665	1.00	42.55
1730	C	SER	A	342	-35.593	30.214	89.400	1.00	32.49
1731	O	SER	A	342	-36.445	30.492	88.565	1.00	35.12
1732	N	ARG	A	343	-35.471	30.872	90.559	1.00	31.84
1733	CA	ARG	A	343	-36.386	31.949	90.917	1.00	32.56
1734	CB	ARG	A	343	-36.532	32.017	92.470	1.00	33.12
1735	CG	ARG	A	343	-37.178	30.751	93.099	1.00	36.80
1736	CD	ARG	A	343	-36.953	30.623	94.628	1.00	43.39
1737	NE	ARG	A	343	-37.670	29.540	95.344	1.00	52.05
1738	CZ	ARG	A	343	-38.085	28.360	94.847	1.00	55.23
1739	NH1	ARG	A	343	-37.862	28.015	93.587	1.00	58.10
1740	NH2	ARG	A	343	-38.717	27.495	95.654	1.00	55.82
1741	C	ARG	A	343	-35.914	33.324	90.386	1.00	32.02
1742	O	ARG	A	343	-36.648	34.286	90.481	1.00	31.13
1743	N	VAL	A	344	-34.717	33.360	89.766	1.00	32.93
1744	CA	VAL	A	344	-34.045	34.613	89.312	1.00	33.02
1745	CB	VAL	A	344	-34.600	35.259	88.032	1.00	33.79
1746	CG1	VAL	A	344	-33.546	36.165	87.403	1.00	33.57
1747	CG2	VAL	A	344	-35.020	34.205	87.041	1.00	34.92
1748	C	VAL	A	344	-33.993	35.587	90.479	1.00	31.91
1749	O	VAL	A	344	-34.392	36.741	90.393	1.00	32.52
1750	N	GLU	A	345	-33.500	35.117	91.597	1.00	33.06
1751	CA	GLU	A	345	-33.507	35.977	92.743	1.00	35.54
1752	CB	GLU	A	345	-34.047	35.248	93.988	1.00	37.02
1753	CG	GLU	A	345	-33.651	33.818	94.122	1.00	44.67
1754	CD	GLU	A	345	-34.183	33.209	95.428	1.00	54.61
1755	OE1	GLU	A	345	-34.610	33.982	96.347	1.00	58.06
1756	OE2	GLU	A	345	-34.139	31.965	95.554	1.00	58.84
1757	C	GLU	A	345	-32.132	36.606	92.961	1.00	33.87
1758	O	GLU	A	345	-31.186	35.950	93.332	1.00	33.72
1759	N	PHE	A	346	-32.045	37.894	92.694	1.00	32.77
1760	CA	PHE	A	346	-30.811	38.628	92.902	1.00	32.91
1761	CB	PHE	A	346	-29.903	38.502	91.657	1.00	33.13
1762	CG	PHE	A	346	-30.431	39.197	90.469	1.00	34.17
1763	CD1	PHE	A	346	-31.338	38.570	89.647	1.00	36.56
1764	CE1	PHE	A	346	-31.838	39.183	88.527	1.00	35.71
1765	CZ	PHE	A	346	-31.465	40.474	88.220	1.00	38.88
1766	CE2	PHE	A	346	-30.569	41.142	89.037	1.00	38.32
1767	CD2	PHE	A	346	-30.018	40.488	90.146	1.00	39.09
1768	C	PHE	A	346	-31.134	40.106	93.174	1.00	33.06
1769	O	PHE	A	346	-32.209	40.598	92.785	1.00	32.92
1770	N	THR	A	347	-30.225	40.796	93.853	1.00	32.73
1771	CA	THR	A	347	-30.385	42.225	94.108	1.00	33.76
1772	CB	THR	A	347	-30.753	42.502	95.597	1.00	33.91
1773	OG1	THR	A	347	-29.776	41.870	96.415	1.00	35.21
1774	CG2	THR	A	347	-32.067	41.798	96.015	1.00	33.87
1775	C	THR	A	347	-29.025	42.839	93.850	1.00	33.74
1776	O	THR	A	347	-27.998	42.142	93.915	1.00	34.60

FIGURE 3AI

A	B	C	D	E	F	G	H	I	J
1777	N	PHE	A	348	-29.028	44.146	93.635	1.00	33.51
1778	CA	PHE	A	348	-27.835	44.911	93.268	1.00	33.28
1779	CB	PHE	A	348	-28.204	45.979	92.254	1.00	32.67
1780	CG	PHE	A	348	-28.626	45.454	90.940	1.00	31.24
1781	CD1	PHE	A	348	-29.962	45.538	90.551	1.00	32.35
1782	CE1	PHE	A	348	-30.374	45.068	89.325	1.00	31.74
1783	CZ	PHE	A	348	-29.433	44.491	88.447	1.00	30.42
1784	CE2	PHE	A	348	-28.090	44.411	88.822	1.00	32.15
1785	CD2	PHE	A	348	-27.695	44.892	90.070	1.00	30.97
1786	C	PHE	A	348	-27.337	45.701	94.453	1.00	35.77
1787	O	PHE	A	348	-28.126	46.255	95.209	1.00	35.76
1788	N	PRO	A	349	-26.025	45.772	94.628	1.00	36.99
1789	CA	PRO	A	349	-25.493	46.699	95.626	1.00	37.46
1790	CB	PRO	A	349	-23.963	46.485	95.567	1.00	38.56
1791	CG	PRO	A	349	-23.670	45.526	94.471	1.00	37.30
1792	CD	PRO	A	349	-24.990	45.029	93.906	1.00	37.24
1793	C	PRO	A	349	-25.883	48.098	95.159	1.00	37.57
1794	O	PRO	A	349	-26.153	48.337	93.990	1.00	36.04
1795	N	ASP	A	350	-25.921	49.055	96.076	1.00	39.36
1796	CA	ASP	A	350	-26.257	50.422	95.693	1.00	40.98
1797	CB	ASP	A	350	-26.206	51.348	96.903	1.00	42.59
1798	CG	ASP	A	350	-27.260	51.031	97.914	1.00	47.11
1799	OD1	ASP	A	350	-27.128	51.620	99.016	1.00	53.92
1800	OD2	ASP	A	350	-28.222	50.225	97.689	1.00	50.42
1801	C	ASP	A	350	-25.351	51.058	94.663	1.00	40.13
1802	O	ASP	A	350	-25.814	51.905	93.909	1.00	40.28
1803	N	PHE	A	351	-24.063	50.736	94.649	1.00	39.85
1804	CA	PHE	A	351	-23.202	51.402	93.673	1.00	39.47
1805	CB	PHE	A	351	-21.718	51.213	93.957	1.00	40.21
1806	CG	PHE	A	351	-21.278	49.784	93.967	1.00	41.11
1807	CD1	PHE	A	351	-21.221	49.082	95.162	1.00	39.89
1808	CE1	PHE	A	351	-20.833	47.761	95.192	1.00	40.56
1809	CZ	PHE	A	351	-20.521	47.111	93.978	1.00	42.46
1810	CE2	PHE	A	351	-20.589	47.826	92.772	1.00	39.35
1811	CD2	PHE	A	351	-20.977	49.124	92.767	1.00	41.22
1812	C	PHE	A	351	-23.543	51.116	92.213	1.00	40.90
1813	O	PHE	A	351	-23.177	51.889	91.325	1.00	41.02
1814	N	VAL	A	352	-24.278	50.042	91.927	1.00	39.58
1815	CA	VAL	A	352	-24.604	49.759	90.531	1.00	38.85
1816	CB	VAL	A	352	-25.223	48.351	90.345	1.00	37.90
1817	CG1	VAL	A	352	-25.491	48.084	88.893	1.00	36.19
1818	CG2	VAL	A	352	-24.271	47.308	90.902	1.00	38.04
1819	C	VAL	A	352	-25.531	50.764	89.905	1.00	39.39
1820	O	VAL	A	352	-26.631	50.985	90.420	1.00	38.87
1821	N	THR	A	353	-25.136	51.309	88.742	1.00	40.16
1822	CA	THR	A	353	-25.943	52.332	88.057	1.00	40.56
1823	CB	THR	A	353	-25.127	53.080	86.987	1.00	41.20
1824	OG1	THR	A	353	-24.703	52.160	85.970	1.00	39.47
1825	CG2	THR	A	353	-23.893	53.625	87.588	1.00	39.13
1826	C	THR	A	353	-27.216	51.852	87.400	1.00	41.64
1827	O	THR	A	353	-27.424	50.664	87.152	1.00	41.19

FIGURE 3AJ

A	B	C	D	E	F	G	H	I	J
1828	N	GLU	A	354	-28.071	52.816	87.102	1.00	41.67
1829	CA	GLU	A	354	-29.321	52.514	86.485	1.00	43.44
1830	CB	GLU	A	354	-30.191	53.770	86.372	1.00	46.05
1831	CG	GLU	A	354	-30.592	54.252	87.751	1.00	54.41
1832	CD	GLU	A	354	-30.894	53.090	88.684	1.00	64.52
1833	OE1	GLU	A	354	-32.014	52.505	88.550	1.00	68.68
1834	OE2	GLU	A	354	-30.038	52.775	89.551	1.00	67.34
1835	C	GLU	A	354	-29.168	51.828	85.156	1.00	41.54
1836	O	GLU	A	354	-29.908	50.900	84.858	1.00	40.38
1837	N	GLY	A	355	-28.226	52.291	84.353	1.00	40.21
1838	CA	GLY	A	355	-28.041	51.714	83.044	1.00	37.79
1839	C	GLY	A	355	-27.598	50.271	83.170	1.00	36.84
1840	O	GLY	A	355	-28.060	49.403	82.423	1.00	37.14
1841	N	ALA	A	356	-26.684	50.016	84.092	1.00	36.29
1842	CA	ALA	A	356	-26.178	48.669	84.268	1.00	36.41
1843	CB	ALA	A	356	-24.998	48.660	85.206	1.00	35.64
1844	C	ALA	A	356	-27.295	47.794	84.782	1.00	35.70
1845	O	ALA	A	356	-27.490	46.695	84.309	1.00	34.90
1846	N	ARG	A	357	-28.072	48.293	85.745	1.00	36.25
1847	CA	ARG	A	357	-29.186	47.504	86.264	1.00	36.61
1848	CB	ARG	A	357	-29.960	48.250	87.339	1.00	36.86
1849	CG	ARG	A	357	-29.169	48.482	88.582	1.00	34.77
1850	CD	ARG	A	357	-29.988	49.289	89.609	1.00	37.61
1851	NE	ARG	A	357	-29.112	49.640	90.708	1.00	36.40
1852	CZ	ARG	A	357	-29.400	49.468	91.975	1.00	35.35
1853	NH1	ARG	A	357	-30.572	48.952	92.320	1.00	39.15
1854	NH2	ARG	A	357	-28.498	49.787	92.890	1.00	33.56
1855	C	ARG	A	357	-30.165	47.167	85.172	1.00	37.12
1856	O	ARG	A	357	-30.718	46.074	85.153	1.00	37.21
1857	N	ASP	A	358	-30.420	48.132	84.297	1.00	37.24
1858	CA	ASP	A	358	-31.353	47.925	83.226	1.00	37.93
1859	CB	ASP	A	358	-31.614	49.202	82.454	1.00	38.87
1860	CG	ASP	A	358	-32.621	48.984	81.324	1.00	42.76
1861	OD1	ASP	A	358	-33.846	49.000	81.602	1.00	46.16
1862	OD2	ASP	A	358	-32.290	48.788	80.126	1.00	45.46
1863	C	ASP	A	358	-30.868	46.836	82.281	1.00	36.98
1864	O	ASP	A	358	-31.656	45.967	81.884	1.00	36.97
1865	N	LEU	A	359	-29.578	46.860	81.942	1.00	35.72
1866	CA	LEU	A	359	-29.042	45.867	81.031	1.00	35.51
1867	CB	LEU	A	359	-27.595	46.168	80.713	1.00	35.38
1868	CG	LEU	A	359	-27.063	45.779	79.327	1.00	39.30
1869	CD1	LEU	A	359	-25.507	45.577	79.301	1.00	37.82
1870	CD2	LEU	A	359	-27.787	44.681	78.634	1.00	35.07
1871	C	LEU	A	359	-29.127	44.477	81.657	1.00	33.71
1872	O	LEU	A	359	-29.575	43.515	81.028	1.00	32.97
1873	N	ILE	A	360	-28.679	44.388	82.900	1.00	32.44
1874	CA	ILE	A	360	-28.646	43.105	83.610	1.00	31.57
1875	CB	ILE	A	360	-27.847	43.253	84.926	1.00	31.85
1876	CG1	ILE	A	360	-26.367	43.490	84.572	1.00	32.47
1877	CD1	ILE	A	360	-25.639	44.299	85.549	1.00	29.24
1878	CG2	ILE	A	360	-27.934	41.956	85.801	1.00	30.72

FIGURE 3AK

A	B	C	D	E	F	G	H	I	J
1879	C	ILE	A	360	-30.053	42.521	83.830	1.00	32.40
1880	O	ILE	A	360	-30.265	41.308	83.611	1.00	31.17
1881	N	SER	A	361	-30.996	43.386	84.214	1.00	32.23
1882	CA	SER	A	361	-32.363	42.958	84.445	1.00	34.85
1883	CB	SER	A	361	-33.223	44.060	85.087	1.00	35.23
1884	OG	SER	A	361	-32.814	44.245	86.443	1.00	40.29
1885	C	SER	A	361	-32.969	42.457	83.143	1.00	34.58
1886	O	SER	A	361	-33.734	41.528	83.147	1.00	34.46
1887	N	ARG	A	362	-32.571	43.020	82.017	1.00	35.27
1888	CA	ARG	A	362	-33.116	42.553	80.736	1.00	35.84
1889	CB	ARG	A	362	-32.908	43.595	79.653	1.00	36.24
1890	CG	ARG	A	362	-33.797	44.805	79.768	1.00	42.24
1891	CD	ARG	A	362	-33.312	46.000	78.930	1.00	48.93
1892	NE	ARG	A	362	-34.160	47.177	79.139	1.00	57.80
1893	CZ	ARG	A	362	-34.932	47.717	78.208	1.00	63.64
1894	NH1	ARG	A	362	-34.931	47.208	76.972	1.00	67.52
1895	NH2	ARG	A	362	-35.696	48.771	78.502	1.00	65.50
1896	C	ARG	A	362	-32.525	41.220	80.283	1.00	35.03
1897	O	ARG	A	362	-33.216	40.429	79.634	1.00	36.42
1898	N	LEU	A	363	-31.279	40.939	80.664	1.00	32.41
1899	CA	LEU	A	363	-30.645	39.705	80.279	1.00	32.03
1900	CB	LEU	A	363	-29.133	39.896	80.329	1.00	31.58
1901	CG	LEU	A	363	-28.234	40.365	79.163	1.00	34.89
1902	CD1	LEU	A	363	-28.757	40.467	77.803	1.00	36.09
1903	CD2	LEU	A	363	-27.243	41.450	79.528	1.00	34.69
1904	C	LEU	A	363	-31.027	38.572	81.203	1.00	32.15
1905	O	LEU	A	363	-31.111	37.430	80.776	1.00	33.41
1906	N	LEU	A	364	-31.268	38.857	82.472	1.00	31.16
1907	CA	LEU	A	364	-31.571	37.770	83.428	1.00	32.01
1908	CB	LEU	A	364	-30.963	38.067	84.804	1.00	31.60
1909	CG	LEU	A	364	-29.420	38.146	84.738	1.00	31.16
1910	CD1	LEU	A	364	-28.840	38.468	86.102	1.00	34.77
1911	CD2	LEU	A	364	-28.841	36.783	84.213	1.00	31.53
1912	C	LEU	A	364	-33.088	37.535	83.500	1.00	33.63
1913	O	LEU	A	364	-33.734	37.811	84.487	1.00	33.26
1914	N	LYS	A	365	-33.662	37.065	82.410	1.00	33.41
1915	CA	LYS	A	365	-35.082	36.796	82.393	1.00	35.64
1916	CB	LYS	A	365	-35.718	37.369	81.135	1.00	35.84
1917	CG	LYS	A	365	-35.929	38.880	81.125	1.00	39.34
1918	CD	LYS	A	365	-36.633	39.297	82.400	1.00	46.53
1919	CE	LYS	A	365	-37.698	40.335	82.107	1.00	49.18
1920	NZ	LYS	A	365	-37.064	41.556	81.577	1.00	54.14
1921	C	LYS	A	365	-35.216	35.299	82.375	1.00	35.57
1922	O	LYS	A	365	-34.516	34.626	81.599	1.00	34.77
1923	N	HIS	A	366	-36.084	34.780	83.241	1.00	34.63
1924	CA	HIS	A	366	-36.339	33.372	83.302	1.00	36.28
1925	CB	HIS	A	366	-37.437	33.047	84.346	1.00	35.81
1926	CG	HIS	A	366	-37.567	31.581	84.590	1.00	39.29
1927	ND1	HIS	A	366	-38.186	30.728	83.693	1.00	41.29
1928	CE1	HIS	A	366	-38.111	29.487	84.145	1.00	40.54
1929	NE2	HIS	A	366	-37.446	29.500	85.291	1.00	42.19

FIGURE 3AL

A	B	C	D	E	F	G	H	I	J
1930	CD2	HIS	A	366	-37.088	30.796	85.587	1.00	39.35
1931	C	HIS	A	366	-36.789	32.856	81.911	1.00	37.30
1932	O	HIS	A	366	-36.356	31.798	81.435	1.00	36.00
1933	N	ASN	A	367	-37.684	33.573	81.261	1.00	38.00
1934	CA	ASN	A	367	-38.095	33.069	79.937	1.00	40.10
1935	CB	ASN	A	367	-39.487	33.598	79.658	1.00	40.85
1936	CG	ASN	A	367	-40.080	33.074	78.380	1.00	44.28
1937	OD1	ASN	A	367	-41.276	33.219	78.172	1.00	51.80
1938	ND2	ASN	A	367	-39.271	32.476	77.525	1.00	46.36
1939	C	ASN	A	367	-37.086	33.524	78.875	1.00	39.35
1940	O	ASN	A	367	-36.961	34.709	78.683	1.00	38.80
1941	N	PRO	A	368	-36.397	32.591	78.210	1.00	39.49
1942	CA	PRO	A	368	-35.336	32.903	77.238	1.00	40.08
1943	CB	PRO	A	368	-34.976	31.536	76.624	1.00	39.29
1944	CG	PRO	A	368	-35.451	30.502	77.567	1.00	40.15
1945	CD	PRO	A	368	-36.633	31.136	78.295	1.00	40.09
1946	C	PRO	A	368	-35.824	33.807	76.112	1.00	40.68
1947	O	PRO	A	368	-35.082	34.684	75.656	1.00	38.95
1948	N	SER	A	369	-37.064	33.592	75.664	1.00	42.38
1949	CA	SER	A	369	-37.639	34.437	74.597	1.00	43.99
1950	CB	SER	A	369	-39.033	33.951	74.203	1.00	44.88
1951	OG	SER	A	369	-38.956	32.601	73.740	1.00	48.55
1952	C	SER	A	369	-37.742	35.894	74.995	1.00	44.04
1953	O	SER	A	369	-37.889	36.754	74.140	1.00	44.29
1954	N	GLN	A	370	-37.692	36.186	76.295	1.00	44.21
1955	CA	GLN	A	370	-37.719	37.591	76.721	1.00	45.13
1956	CB	GLN	A	370	-38.437	37.739	78.053	1.00	45.55
1957	CG	GLN	A	370	-39.839	37.121	77.994	1.00	50.14
1958	CD	GLN	A	370	-40.602	37.264	79.300	1.00	56.48
1959	OE1	GLN	A	370	-41.679	36.646	79.474	1.00	60.38
1960	NE2	GLN	A	370	-40.060	38.056	80.230	1.00	55.95
1961	C	GLN	A	370	-36.332	38.231	76.806	1.00	44.45
1962	O	GLN	A	370	-36.210	39.423	77.063	1.00	44.24
1963	N	ARG	A	371	-35.285	37.430	76.631	1.00	43.95
1964	CA	ARG	A	371	-33.915	37.962	76.693	1.00	43.01
1965	CB	ARG	A	371	-32.911	36.827	76.882	1.00	42.30
1966	CG	ARG	A	371	-32.994	36.206	78.279	1.00	36.93
1967	CD	ARG	A	371	-32.118	35.032	78.477	1.00	33.96
1968	NE	ARG	A	371	-32.732	34.134	79.452	1.00	33.75
1969	CZ	ARG	A	371	-32.561	32.828	79.521	1.00	32.13
1970	NH1	ARG	A	371	-33.243	32.141	80.440	1.00	33.40
1971	NH2	ARG	A	371	-31.717	32.197	78.702	1.00	30.58
1972	C	ARG	A	371	-33.641	38.717	75.406	1.00	42.92
1973	O	ARG	A	371	-34.115	38.306	74.374	1.00	43.48
1974	N	PRO	A	372	-32.927	39.831	75.459	1.00	43.09
1975	CA	PRO	A	372	-32.678	40.611	74.234	1.00	42.76
1976	CB	PRO	A	372	-31.890	41.837	74.717	1.00	43.00
1977	CG	PRO	A	372	-31.590	41.648	76.178	1.00	42.62
1978	CD	PRO	A	372	-32.371	40.456	76.678	1.00	43.28
1979	C	PRO	A	372	-31.829	39.874	73.226	1.00	43.31
1980	O	PRO	A	372	-31.191	38.862	73.545	1.00	43.24

FIGURE 3AM

A	B	C	D	E	F	G	H	I	J
1981	N	MET	A	373	-31.820	40.378	71.995	1.00	43.19
1982	CA	MET	A	373	-30.928	39.857	70.976	1.00	43.50
1983	CB	MET	A	373	-31.448	40.174	69.585	1.00	44.61
1984	CG	MET	A	373	-32.688	39.421	69.205	1.00	50.78
1985	SD	MET	A	373	-33.173	39.941	67.576	1.00	64.15
1986	CE	MET	A	373	-32.985	41.823	67.726	1.00	59.77
1987	C	MET	A	373	-29.564	40.516	71.172	1.00	42.00
1988	O	MET	A	373	-29.452	41.539	71.841	1.00	39.32
1989	N	LEU	A	374	-28.526	39.926	70.597	1.00	41.82
1990	CA	LEU	A	374	-27.188	40.488	70.727	1.00	43.13
1991	CB	LEU	A	374	-26.194	39.605	70.025	1.00	43.22
1992	CG	LEU	A	374	-25.814	38.411	70.923	1.00	45.40
1993	CD1	LEU	A	374	-24.780	37.453	70.278	1.00	44.95
1994	CD2	LEU	A	374	-25.284	38.861	72.288	1.00	41.96
1995	C	LEU	A	374	-27.192	41.923	70.171	1.00	43.85
1996	O	LEU	A	374	-26.478	42.788	70.667	1.00	43.31
1997	N	ALA	A	375	-27.951	42.152	69.118	1.00	43.58
1998	CA	ALA	A	375	-27.979	43.472	68.494	1.00	44.11
1999	CB	ALA	A	375	-29.028	43.491	67.388	1.00	43.88
2000	C	ALA	A	375	-28.336	44.516	69.517	1.00	43.69
2001	O	ALA	A	375	-27.783	45.616	69.548	1.00	45.16
2002	N	GLU	A	376	-29.265	44.123	70.370	1.00	43.44
2003	CA	GLU	A	376	-29.855	44.996	71.354	1.00	43.12
2004	CB	GLU	A	376	-31.147	44.357	71.836	1.00	43.67
2005	CG	GLU	A	376	-32.103	44.068	70.705	1.00	49.90
2006	CD	GLU	A	376	-33.520	43.811	71.206	1.00	57.55
2007	OE1	GLU	A	376	-33.691	42.679	71.699	1.00	56.12
2008	OE2	GLU	A	376	-34.454	44.705	71.124	1.00	60.58
2009	C	GLU	A	376	-28.969	45.306	72.529	1.00	41.38
2010	O	GLU	A	376	-29.116	46.343	73.152	1.00	42.50
2011	N	VAL	A	377	-28.059	44.394	72.850	1.00	39.33
2012	CA	VAL	A	377	-27.116	44.602	73.948	1.00	37.51
2013	CB	VAL	A	377	-26.405	43.276	74.328	1.00	36.63
2014	CG1	VAL	A	377	-25.281	43.536	75.284	1.00	35.55
2015	CG2	VAL	A	377	-27.416	42.254	74.883	1.00	37.26
2016	C	VAL	A	377	-26.043	45.547	73.449	1.00	37.40
2017	O	VAL	A	377	-25.604	46.436	74.147	1.00	37.91
2018	N	LEU	A	378	-25.621	45.323	72.219	1.00	37.51
2019	CA	LEU	A	378	-24.580	46.115	71.589	1.00	39.81
2020	CB	LEU	A	378	-24.266	45.532	70.217	1.00	40.42
2021	CG	LEU	A	378	-23.393	44.286	70.335	1.00	41.70
2022	CD1	LEU	A	378	-23.067	43.658	68.983	1.00	46.77
2023	CD2	LEU	A	378	-22.130	44.678	71.057	1.00	37.23
2024	C	LEU	A	378	-24.946	47.580	71.442	1.00	41.32
2025	O	LEU	A	378	-24.075	48.445	71.358	1.00	42.45
2026	N	GLU	A	379	-26.244	47.845	71.421	1.00	41.71
2027	CA	GLU	A	379	-26.719	49.178	71.213	1.00	42.63
2028	CB	GLU	A	379	-27.670	49.206	70.018	1.00	44.54
2029	CG	GLU	A	379	-26.995	48.791	68.724	1.00	47.20
2030	CD	GLU	A	379	-27.923	48.707	67.527	1.00	56.88
2031	OE1	GLU	A	379	-29.177	48.664	67.706	1.00	59.40

FIGURE 3AN

A	B	C	D	E	F	G	H	I	J
2032	OE2	GLU	A	379	-27.372	48.665	66.389	1.00	61.82
2033	C	GLU	A	379	-27.401	49.692	72.460	1.00	43.14
2034	O	GLU	A	379	-28.071	50.749	72.435	1.00	43.40
2035	N	HIS	A	380	-27.244	48.966	73.575	1.00	41.24
2036	CA	HIS	A	380	-27.851	49.440	74.793	1.00	40.10
2037	CB	HIS	A	380	-27.681	48.393	75.915	1.00	39.60
2038	CG	HIS	A	380	-28.332	48.789	77.191	1.00	38.52
2039	ND1	HIS	A	380	-29.551	48.279	77.590	1.00	40.40
2040	CE1	HIS	A	380	-29.890	48.824	78.747	1.00	37.68
2041	NE2	HIS	A	380	-28.923	49.643	79.122	1.00	39.48
2042	CD2	HIS	A	380	-27.942	49.644	78.160	1.00	34.37
2043	C	HIS	A	380	-27.163	50.747	75.172	1.00	39.36
2044	O	HIS	A	380	-25.985	50.841	75.006	1.00	39.34
2045	N	PRO	A	381	-27.882	51.732	75.713	1.00	40.21
2046	CA	PRO	A	381	-27.277	53.041	75.975	1.00	40.19
2047	CB	PRO	A	381	-28.439	53.885	76.518	1.00	40.84
2048	CG	PRO	A	381	-29.677	53.167	76.093	1.00	42.96
2049	CD	PRO	A	381	-29.307	51.702	76.106	1.00	40.74
2050	C	PRO	A	381	-26.165	52.971	77.002	1.00	39.71
2051	O	PRO	A	381	-25.239	53.739	76.860	1.00	38.49
2052	N	TRP	A	382	-26.267	52.094	78.015	1.00	37.20
2053	CA	TRP	A	382	-25.213	51.967	79.007	1.00	36.17
2054	CB	TRP	A	382	-25.638	51.046	80.145	1.00	34.80
2055	CG	TRP	A	382	-24.604	50.947	81.203	1.00	35.01
2056	CD1	TRP	A	382	-24.349	51.852	82.170	1.00	36.17
2057	NE1	TRP	A	382	-23.326	51.402	82.975	1.00	39.89
2058	CE2	TRP	A	382	-22.895	50.191	82.505	1.00	36.83
2059	CD2	TRP	A	382	-23.684	49.879	81.391	1.00	34.51
2060	CE3	TRP	A	382	-23.437	48.680	80.716	1.00	37.27
2061	CZ3	TRP	A	382	-22.450	47.843	81.185	1.00	35.85
2062	CH2	TRP	A	382	-21.675	48.196	82.283	1.00	34.82
2063	CZ2	TRP	A	382	-21.887	49.357	82.966	1.00	32.53
2064	C	TRP	A	382	-23.940	51.436	78.346	1.00	36.25
2065	O	TRP	A	382	-22.833	51.887	78.657	1.00	36.89
2066	N	ILE	A	383	-24.090	50.456	77.472	1.00	36.03
2067	CA	ILE	A	383	-22.943	49.924	76.734	1.00	36.79
2068	CB	ILE	A	383	-23.373	48.683	75.892	1.00	36.16
2069	CG1	ILE	A	383	-23.751	47.476	76.802	1.00	34.61
2070	CD1	ILE	A	383	-22.522	46.916	77.531	1.00	34.04
2071	CG2	ILE	A	383	-22.221	48.209	75.038	1.00	35.05
2072	C	ILE	A	383	-22.377	51.014	75.804	1.00	39.31
2073	O	ILE	A	383	-21.172	51.250	75.708	1.00	40.13
2074	N	THR	A	384	-23.268	51.707	75.130	1.00	41.29
2075	CA	THR	A	384	-22.849	52.781	74.221	1.00	44.28
2076	CB	THR	A	384	-24.120	53.418	73.673	1.00	44.01
2077	OG1	THR	A	384	-24.539	52.622	72.568	1.00	48.12
2078	CG2	THR	A	384	-23.822	54.750	73.090	1.00	49.09
2079	C	THR	A	384	-22.006	53.846	74.885	1.00	43.49
2080	O	THR	A	384	-20.980	54.271	74.359	1.00	46.02
2081	N	ALA	A	385	-22.449	54.281	76.044	1.00	42.28
2082	CA	ALA	A	385	-21.779	55.332	76.763	1.00	42.24

FIGURE 3AO

A	B	C	D	E	F	G	H	I	J
2083	CB	ALA	A	385	-22.705	55.884	77.823	1.00	41.95
2084	C	ALA	A	385	-20.509	54.897	77.424	1.00	42.41
2085	O	ALA	A	385	-19.606	55.728	77.660	1.00	43.21
2086	N	ASN	A	386	-20.404	53.612	77.749	1.00	40.11
2087	CA	ASN	A	386	-19.254	53.178	78.478	1.00	38.95
2088	CB	ASN	A	386	-19.696	52.453	79.740	1.00	39.05
2089	CG	ASN	A	386	-20.371	53.392	80.739	1.00	39.22
2090	OD1	ASN	A	386	-19.698	54.080	81.495	1.00	40.98
2091	ND2	ASN	A	386	-21.695	53.396	80.754	1.00	40.56
2092	C	ASN	A	386	-18.195	52.366	77.760	1.00	38.55
2093	O	ASN	A	386	-17.077	52.329	78.212	1.00	37.05
2094	N	SER	A	387	-18.545	51.701	76.682	1.00	39.28
2095	CA	SER	A	387	-17.604	50.833	75.997	1.00	41.73
2096	CB	SER	A	387	-18.322	49.922	75.010	1.00	40.55
2097	OG	SER	A	387	-17.359	49.075	74.356	1.00	42.67
2098	C	SER	A	387	-16.573	51.578	75.172	1.00	43.18
2099	O	SER	A	387	-16.930	52.538	74.482	1.00	43.25
2100	N	SER	A	388	-15.344	51.059	75.181	1.00	44.22
2101	CA	SER	A	388	-14.244	51.555	74.351	1.00	46.24
2102	CB	SER	A	388	-12.908	51.070	74.888	1.00	46.39
2103	OG	SER	A	388	-12.725	51.591	76.195	1.00	49.91
2104	C	SER	A	388	-14.358	51.150	72.894	1.00	46.36
2105	O	SER	A	388	-15.115	50.231	72.549	1.00	48.50
2106	O1A	ADP	X2001		-9.414	25.400	78.378	1.00	28.64
2107	PA	ADP	X2001		-9.486	25.363	79.862	1.00	30.26
2108	O2A	ADP	X2001		-10.590	26.255	80.350	1.00	28.31
2109	O3A	ADP	X2001		-9.587	23.880	80.555	1.00	30.98
2110	PB	ADP	X2001		-10.917	23.134	80.991	1.00	31.28
2111	O3B	ADP	X2001		-11.692	24.139	81.826	1.00	28.29
2112	O2B	ADP	X2001		-10.390	21.986	81.811	1.00	35.80
2113	O1B	ADP	X2001		-11.688	22.740	79.755	1.00	28.57
2114	O5*	ADP	X2001		-8.144	25.872	80.503	1.00	30.75
2115	C5*	ADP	X2001		-8.004	25.866	81.924	1.00	30.70
2116	C4*	ADP	X2001		-7.217	27.124	82.368	1.00	29.95
2117	O4*	ADP	X2001		-5.951	27.178	81.679	1.00	28.79
2118	C1*	ADP	X2001		-5.642	28.545	81.342	1.00	29.10
2119	C2*	ADP	X2001		-6.747	29.415	81.899	1.00	26.58
2120	O2*	ADP	X2001		-6.392	29.725	83.238	1.00	34.16
2121	C3*	ADP	X2001		-7.895	28.436	81.993	1.00	29.24
2122	O3*	ADP	X2001		-8.952	28.763	82.864	1.00	32.70
2123	N9	ADP	X2001		-5.577	28.628	79.892	1.00	29.80
2124	C8	ADP	X2001		-6.337	27.843	79.041	1.00	30.16
2125	N7	ADP	X2001		-6.028	28.206	77.750	1.00	29.74
2126	C5	ADP	X2001		-5.143	29.196	77.814	1.00	26.13
2127	C6	ADP	X2001		-4.519	29.877	76.813	1.00	29.08
2128	N6	ADP	X2001		-4.713	29.555	75.506	1.00	25.43
2129	C4	ADP	X2001		-4.835	29.464	79.141	1.00	28.26
2130	N3	ADP	X2001		-3.975	30.435	79.478	1.00	30.28
2131	C2	ADP	X2001		-3.350	31.144	78.490	1.00	31.73
2132	N1	ADP	X2001		-3.633	30.829	77.180	1.00	29.64
2133	O	HOH	X3001		-9.988	28.798	79.067	1.00	31.10

FIGURE 3AP

A	B	C	D	E	F	G	H	I	J
2134	O	HOH	X3003		-14.393	22.868	80.872	1.00	27.85
2135	O	HOH	X3004		-13.728	20.345	80.020	1.00	45.36
2136	O	HOH	X3005		-26.951	31.694	86.552	1.00	30.10
2137	O	HOH	X3006		-22.935	30.435	78.351	1.00	36.29
2138	O	HOH	X3007		-30.168	16.939	71.846	1.00	45.13
2139	O	HOH	X3008		-18.066	25.328	75.601	1.00	31.20
2140	O	HOH	X3009		-11.548	26.843	82.941	1.00	36.99
2141	O	HOH	X3010		-8.649	27.311	76.774	1.00	31.45
2142	O	HOH	X3011		-37.854	36.557	85.013	1.00	38.02
2143	O	HOH	X3012		-27.723	38.845	94.275	1.00	37.13
2144	O	HOH	X3013		-16.636	24.694	78.361	1.00	32.
2145	O	HOH	X3014		-8.241	35.027	68.248	1.00	33.00
2146	O	HOH	X3015		-0.912	17.916	82.933	1.00	36.14
2147	O	HOH	X3017		-15.066	34.944	89.120	1.00	42.99
2148	O	HOH	X3018		-22.824	25.783	92.176	1.00	46.76
2149	O	HOH	X3021		-11.944	23.669	84.418	1.00	39.47
2150	O	HOH	X3022		-12.703	21.499	77.561	1.00	40.61
2151	O	HOH	X3023		-37.367	42.995	79.960	1.00	59.45
2152	O	HOH	X3024		-5.576	15.379	86.195	1.00	66.48
2153	O	HOH	X3026		-8.353	43.652	79.479	1.00	44.84
2154	O	HOH	X3027		-23.236	19.714	67.938	1.00	47.17
2155	O	HOH	X3028		-10.809	32.568	66.377	1.00	35.26
2156	O	HOH	X3029		-15.673	31.938	88.442	1.00	44.34
2157	O	HOH	X3030		-0.223	35.059	71.257	1.00	55.88
2158	O	HOH	X3031		-20.254	50.297	89.242	1.00	49.49
2159	O	HOH	X3032		-4.408	26.185	61.520	1.00	57.94
2160	O	HOH	X3033		-6.464	20.470	80.244	1.00	42.32
2161	O	HOH	X3034		-26.908	54.727	81.094	1.00	46.09
2162	O	HOH	X3036		-3.500	31.862	81.803	1.00	43.64
2163	O	HOH	X3037		-28.118	35.557	69.369	1.00	53.58
2164	O	HOH	X3038		-26.182	36.321	65.264	1.00	49.67
2165	O	HOH	X3039		14.155	34.581	65.299	1.00	48.35
2166	O	HOH	X3040		-34.861	43.555	76.702	1.00	53.19
2167	O	HOH	X3041		-39.173	35.975	82.307	1.00	45.97
2168	O	HOH	X3043		-14.153	39.758	92.741	1.00	38.14
2169	O	HOH	X3044		-17.759	51.104	95.196	1.00	63.77
2170	O	HOH	X3045		-17.674	46.814	68.492	1.00	55.41
2171	O	HOH	X3046		-21.016	27.883	83.182	1.00	40.34
2172	O	HOH	X3047		-32.376	28.743	75.835	1.00	35.07
2173	O	HOH	X3048		-26.582	54.610	84.614	1.00	51.10
2174	O	HOH	X3049		-28.989	37.779	69.028	1.00	45.59
2175	O	HOH	X3050		1.044	35.132	80.541	1.00	40.83
2176	O	HOH	X3051		-18.143	48.279	89.631	1.00	35.13
2177	O	HOH	X3052		-22.772	50.169	87.633	1.00	35.90
2178	O	HOH	X3054		-28.242	40.105	67.233	1.00	39.46
2179	O	HOH	X3055		-5.648	27.887	86.644	1.00	45.28
2180	O	HOH	X3056		-22.278	29.579	81.107	1.00	46.99
2181	O	HOH	X3057		-21.804	27.943	85.859	1.00	31.17
2182	O	HOH	X3058		-19.327	55.542	84.158	1.00	69.06
2183	O	HOH	X3059		-16.658	53.812	86.138	1.00	76.39
2184	O	HOH	X3060		-11.616	48.407	86.048	1.00	44.96

FIGURE 3AQ

A	B	C	D	E	F	G	H	I	J
2185	O	HOH	X3061		-35.280	41.364	78.456	1.00	43.63
2186	O	HOH	X3062		-35.848	29.209	81.326	1.00	50.09
2187	O	HOH	X3063		-20.386	19.911	74.001	1.00	46.93
2188	O	HOH	X3064		-5.444	37.823	84.054	1.00	35.84
2189	O	HOH	X3066		-2.738	38.173	71.721	1.00	47.11
2190	O	HOH	X3067		-3.973	35.760	72.248	1.00	33.90
2191	O	HOH	X3068		-29.746	39.136	96.635	1.00	62.80
2192	O	HOH	X3070		-14.064	25.472	82.227	1.00	31.69
2193	O	HOH	X2089		-4.484	33.261	84.056	1.00	47.20
2194	O	HOH	X2090		-9.895	27.055	74.329	1.00	27.24
2195	O	HOH	X2091		-0.170	31.678	70.061	1.00	29.25
2196	O	HOH	X2092		-1.106	31.853	83.735	1.00	53.32
2197	O	HOH	X2093		-25.264	41.053	66.798	1.00	59.10
2198	O	HOH	X2094		-25.466	43.888	65.479	1.00	69.73
2199	O	HOH	X2095		-32.272	31.292	69.214	1.00	67.50
2200	O	HOH	X2096		-24.385	33.367	89.916	1.00	31.89
2201	O	HOH	X2097		-14.677	21.587	82.263	1.00	41.33
2202	O	HOH	X2098		-15.335	22.257	78.530	1.00	36.43
2203	O	HOH	X2099		-11.146	29.804	67.165	1.00	47.94
2204	O	HOH	X2100		-9.610	28.214	65.560	1.00	46.43
2205	MG	MG	X2086		-13.528	22.597	79.198	1.00	12.09
2206	MG	MG	X2088		-12.337	25.921	81.074	1.00	12.20
2207	P	PO4	X2002		-24.838	17.852	76.312	1.00	54.63
2208	O1	PO4	X2002		-24.694	18.499	74.963	1.00	59.50
2209	O2	PO4	X2002		-26.204	17.207	76.361	1.00	64.72
2210	O3	PO4	X2002		-23.779	16.793	76.532	1.00	57.00
2211	O4	PO4	X2002		-24.798	18.859	77.420	1.00	60.01